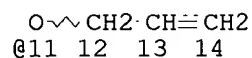
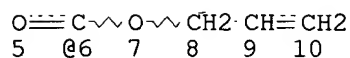
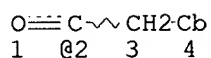


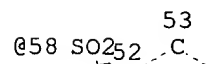
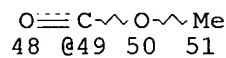
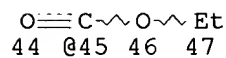
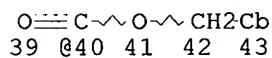
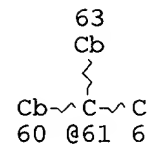
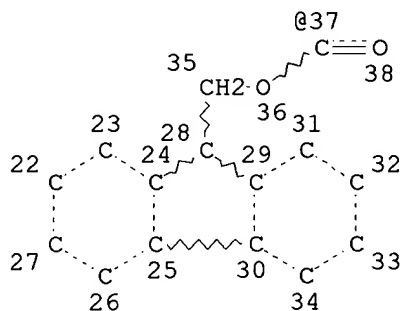
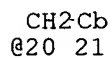
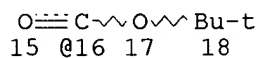
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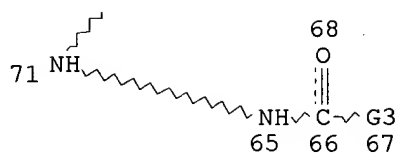
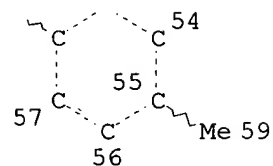


Page 1-A

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Page 1-B



Page 2-A

VAR G3=N/CH2

VAR G4=2/6/11/19/16/20/37/61/40/45/49/58

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 4  
 CONNECT IS E1 RC AT 21  
 CONNECT IS E1 RC AT 43  
 CONNECT IS E1 RC AT 60  
 CONNECT IS E1 RC AT 62  
 CONNECT IS E1 RC AT 63  
 DEFAULT MLEVEL IS ATOM  
 GGCAT IS PCY SAT AT 4  
 GGCAT IS MCY UNS AT 21  
 GGCAT IS MCY UNS AT 43  
 GGCAT IS MCY UNS AT 60  
 GGCAT IS MCY UNS AT 62  
 GGCAT IS MCY UNS AT 63  
 DEFAULT ECLEVEL IS LIMITED  
 ECOUNT IS E10 C AT 4  
 ECOUNT IS E6 C AT 21  
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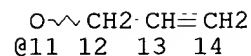
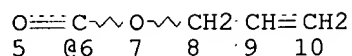
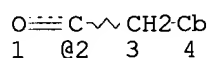
RSPEC 22 52

NUMBER OF NODES IS 69

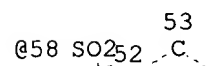
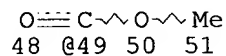
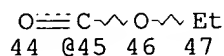
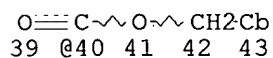
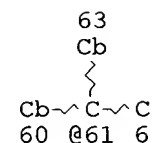
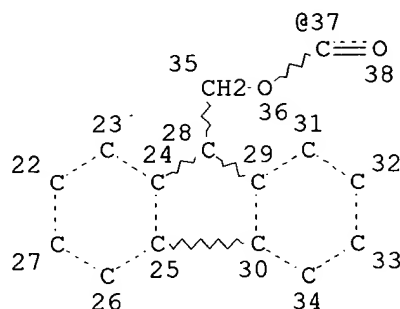
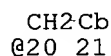
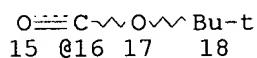
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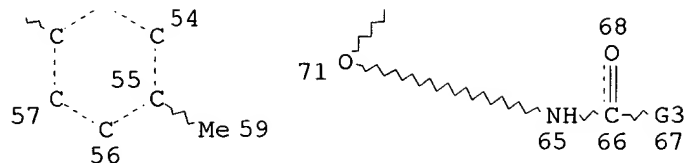


Page 1-A

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Page 1-B



Page 2-A

VAR G3=N/CH2

VAR G4=2/6/11/19/16/20/37/61/40/45/49/58

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 4  
 CONNECT IS E1 RC AT 21  
 CONNECT IS E1 RC AT 43  
 CONNECT IS E1 RC AT 60  
 CONNECT IS E1 RC AT 62  
 CONNECT IS E1 RC AT 63

DEFAULT MLEVEL IS ATOM

GGCAT IS PCY SAT AT 4  
 GGCAT IS MCY UNS AT 21  
 GGCAT IS MCY UNS AT 43  
 GGCAT IS MCY UNS AT 60  
 GGCAT IS MCY UNS AT 62  
 GGCAT IS MCY UNS AT 63

DEFAULT ECLEVEL IS LIMITED

ECOUNT IS E10 C AT 4  
 ECOUNT IS E6 C AT 21  
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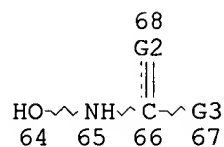
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NUMBER OF NODES IS 69

STEREO ATTRIBUTES: NONE

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 L25 1530 SEA FILE=HCAPLUS ABB=ON PLU=ON PEPTIDE LIBRARY+NT/CT  
 L26 1364 SEA FILE=HCAPLUS ABB=ON PLU=ON PEPTIDOMIMETICS+NT/CT  
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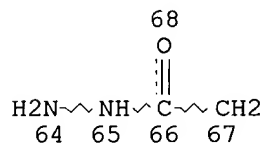
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 L28 OR L29)  
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 L37 STR



VAR G2=O/S/N  
 VAR G3=N/CH2  
 NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE  
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NODE ATTRIBUTES:  
 DEFAULT MLEVEL IS ATOM  
 DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
 RING(S) ARE ISOLATED OR EMBEDDED  
 NUMBER OF NODES IS 5

STEREO ATTRIBUTES: NONE  
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 L51 21311 SEA FILE=REGISTRY ABB=ON PLU=ON L39 OR L50  
 L52 15 SEA FILE=HCAPLUS ABB=ON PLU=ON L30 AND L51  
 L53 18 SEA FILE=HCAPLUS ABB=ON PLU=ON L52 OR L31

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L53 ANSWER 1 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 2001:627227 HCAPLUS  
 DOCUMENT NUMBER: 135:180955  
 TITLE: Methods for solid-phase synthesis of hydroxylamine

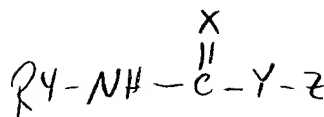
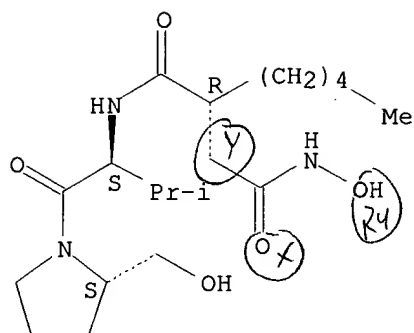
INVENTOR(S): compounds and derivatives and combinatorial libraries  
 Patel, Dinesh V.; Ngu, Khehyong  
 PATENT ASSIGNEE(S): Versicor, Inc., USA  
 SOURCE: U.S., 76 pp., Cont.-in-part of U.S. Ser. No. 958,638.  
 CODEN: USXXAM  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6281245	B1	20010828	US 1998-74035	19980506
US 2001053555	A1	20011220	US 1997-958638	19971027
WO 9957097	A2	19991111	WO 1999-US9996	19990506
WO 9957097	A3	20000309		

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 DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP,  
 KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN,  
 MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM,  
 TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD,  
 RU, TJ, TM  
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 CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG  
 AU 9939748 A1 19991123 AU 1999-39748 19990506  
 PRIORITY APPLN. INFO.: US 1996-29788P P 19961028  
 US 1997-47468P P 19970523  
 US 1997-958638 A2 19971027  
 US 1998-74035 A 19980506  
 WO 1999-US9996 W 19990506

OTHER SOURCE(S): MARPAT 135:180955  
 AB Hydroxylamine compds. HONHCOCHR1NR2COR3, HONHCOCHR1NR2CONR3R4, and  
 HONHCOCHR1CHR2CONR3R4 (R1-R4 = H, alkyl, heteroalkyl, aryl, heteroaryl,  
 heterocyclyl and (non)naturally occurring amino acid side chains) or  
 stereoisomers, protected derivs., or salts were prepd. Techniques of  
 combinatorial chem. can be applied to immobilized alkoxyamines to generate  
 a diverse set of compds. Thus, (S,S)-HONHCOCH2CH(CH2CH2SMe)CONHCH(Bu-  
 i)CONHC6H4NO2-p was prepd. and assayed for peptide deformylase and  
 antimicrobial activities [IC50 = 11 nM and 64 .mu.M/mL (S. aureus),  
 resp.].  
 IT 13434-13-4P 249535-65-7P 249535-67-9P  
 249535-68-0P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
 study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
 BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (solid-phase synthesis of hydroxylamine compds. and derivs. and  
 combinatorial libraries)  
 RN 13434-13-4 HCAPLUS  
 CN Butanediamide, N4-hydroxy-N1-[(1S)-1-[[ (2S)-2-(hydroxymethyl)-1-  
 pyrrolidinyl]carbonyl]-2-methylpropyl]-2-pentyl-, (2R)- (9CI) (CA INDEX  
 NAME)

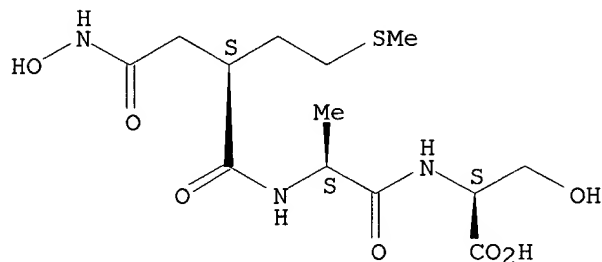
Absolute stereochemistry. Rotation (-).



RN 249535-65-7 HCAPLUS

CN L-Serine, N-[(2S)-4-(hydroxyamino)-2-[2-(methylthio)ethyl]-1,4-dioxobutyl]-L-alanyl- (9CI) (CA INDEX NAME)

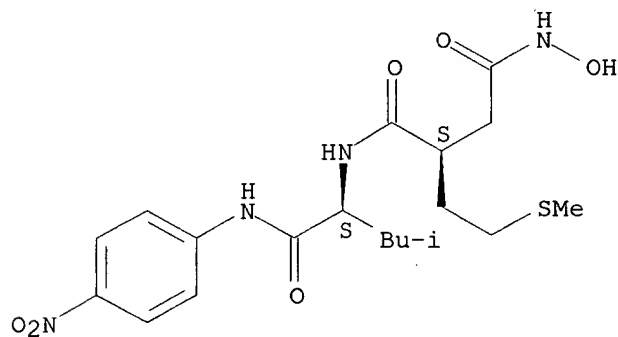
Absolute stereochemistry.



RN 249535-67-9 HCAPLUS

CN Butanediamide, N4-hydroxy-N1-[(1S)-3-methyl-1-[[4-nitrophenyl]amino]carbonyl]butyl]-2-[2-(methylthio)ethyl]-, (2S)- (9CI) (CA INDEX NAME)

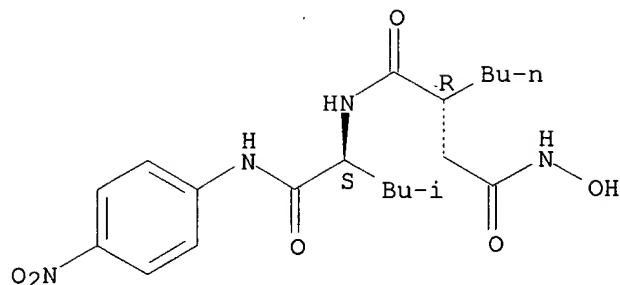
Absolute stereochemistry.



RN 249535-68-0 HCAPLUS

CN Butanediamide, 2-butyl-N4-hydroxy-N1-[(1S)-3-methyl-1-[[4-nitrophenyl]amino]carbonyl]butyl]-, (2R)- (9CI) (CA INDEX NAME)

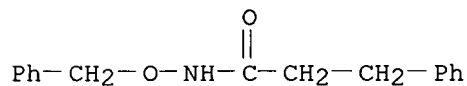
Absolute stereochemistry.

IT **22426-87-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
(solid-phase synthesis of hydroxylamine compds. and derivs. and  
combinatorial libraries)

RN 22426-87-5 HCAPLUS

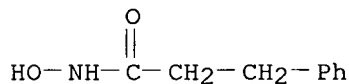
CN Benzenepropanamide, N-(phenylmethoxy)- (9CI) (CA INDEX NAME)

IT **17698-11-2P 56439-40-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis of hydroxylamine compds. and derivs. and  
combinatorial libraries)

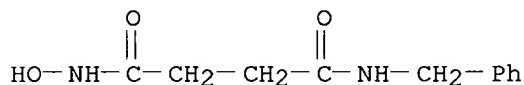
RN 17698-11-2 HCAPLUS

CN Benzenepropanamide, N-hydroxy- (9CI) (CA INDEX NAME)



RN 56439-40-8 HCAPLUS

CN Butanediamide, N-hydroxy-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)



IC ICM A61K031-19

NCL 514575000

CC 34-3 (Amino Acids, Peptides, and Proteins)  
Section cross-reference(s): 1, 10

IT Antibacterial agents

**Combinatorial library****Solid phase synthesis**

(solid-phase synthesis of hydroxylamine compds. and derivs. and

combinatorial libraries)

IT **13434-13-4P 249535-65-7P 249535-67-9P 249535-68-0P** 249535-69-1P 249535-70-4P  
 RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
 (solid-phase synthesis of hydroxylamine compds. and derivs. and combinatorial libraries)

IT 2687-43-6P, o-Benzylhydroxylamine hydrochloride **22426-87-5P**  
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 197304-23-7P 197304-24-8DP, resin-bound 197304-24-8P 197304-25-9DP, resin-bound 197304-25-9P 200866-59-7P 200866-61-1P 249535-71-5P  
 249535-72-6P 249535-73-7P 249535-76-0P 249535-77-1DP, resin-bound 249535-78-2DP, resin-bound  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
 (solid-phase synthesis of hydroxylamine compds. and derivs. and combinatorial libraries)

IT **17698-11-2P 56439-40-8P** 153720-65-1P 161313-73-1P  
 161314-70-1P 193807-79-3P 207462-42-8P 249535-74-8P 249535-75-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid-phase synthesis of hydroxylamine compds. and derivs. and combinatorial libraries)

REFERENCE COUNT: 57 THERE ARE 57 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 2 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:320377 HCAPLUS

DOCUMENT NUMBER: 135:92837

TITLE: Solid-Phase Synthesis of a Nonpeptide RGD Mimetic Library: New Selective .alpha.v.beta.3 Integrin Antagonists

AUTHOR(S): Sulyok, Gabor A. G.; Gibson, Christoph; Goodman, Simon L.; Holzemann, Gunter; Wiesner, Matthias; Kessler, Horst

CORPORATE SOURCE: Institut fur Organische Chemie und Biochemie, Technische Universitat Munchen, Garching, D-85747, Germany

SOURCE: Journal of Medicinal Chemistry (2001), 44(12), 1938-1950

CODEN: JMCMAR; ISSN: 0022-2623

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

AB The solid-phase synthesis of a low mol. wt. RGD mimetic library is described. Activities of the compds. in inhibiting the interaction of ligands, vitronectin and fibrinogen, with isolated immobilized integrins .alpha.v.beta.3 and .alpha.IIb.beta.3 were detd. in a screening assay. Highly active and selective nonpeptide .alpha.v.beta.3 integrin antagonists with regard to orally bioavailability were developed, based on the aza-glycine contg. lead compd. H<sub>2</sub>NC(:NH)NH-3-C<sub>6</sub>H<sub>4</sub>-C(O)NHNHC(O)NHCH(C(O)NH<sub>2</sub>)CH<sub>2</sub>CO<sub>2</sub>H (I). An important variation is the substitution of the aspartic amide of I by an arom. residue. Furthermore, different guanidine mimetics have been incorporated to improve the pharmacokinetic profile. Exchange of the .beta.-amino acid NH by a methylene moiety in one set of RGD mimetics leads to the azacarba analog compds. representing a novel peptidomimetic approach, which should



increase the metabolic stability.

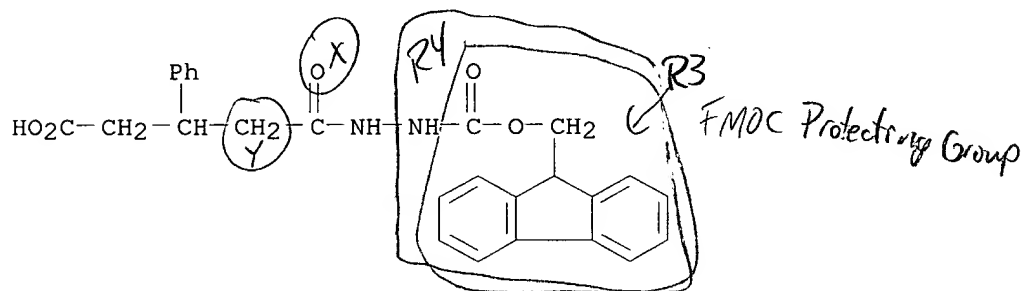
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 348110-46-3DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(prepn. of aza-glycine RGD peptidomimetics for use as .alpha.v.beta.3 integrin antagonists via solid-phase combinatorial library methods)

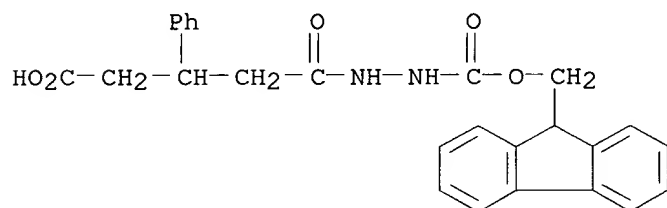
RN 320727-73-9 HCAPLUS

CN Pentanedioic acid, 3-phenyl-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)



RN 320727-73-9 HCAPLUS

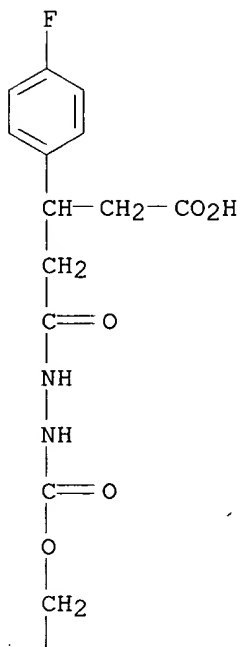
CN Pentanedioic acid, 3-phenyl-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)



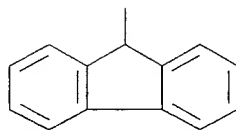
RN 348110-32-7 HCAPLUS

CN Pentanedioic acid, 3-(4-fluorophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A

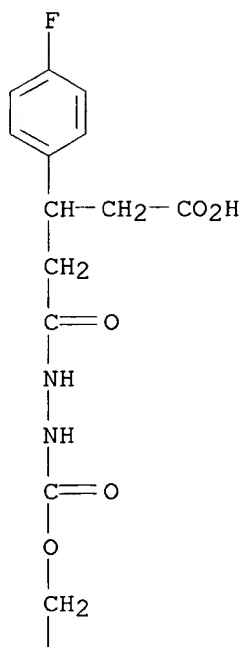


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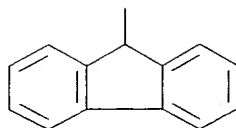


RN 348110-32-7 HCAPLUS  
CN Pentanedioic acid, 3-(4-fluorophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A

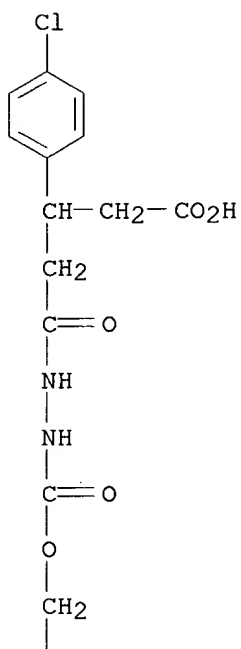


PAGE 2-A

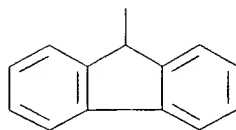


RN 348110-33-8 HCAPLUS  
CN Pentanedioic acid, 3-(4-chlorophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A

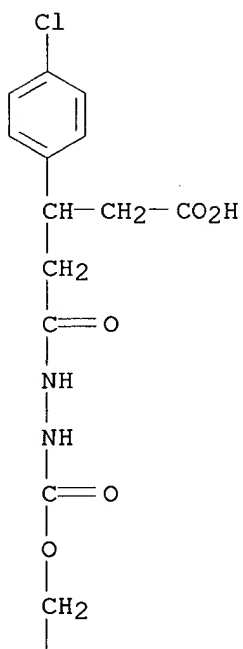


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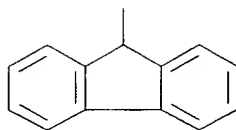


RN 348110-33-8 HCAPLUS  
CN Pentanedioic acid, 3-(4-chlorophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A

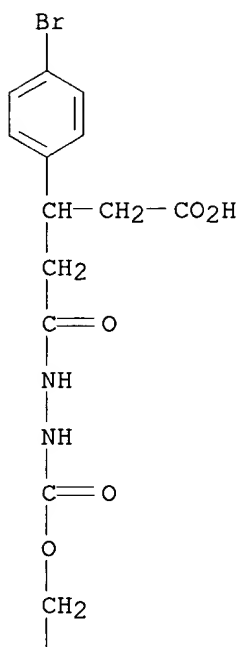


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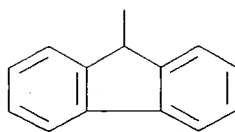


RN 348110-34-9 HCAPLUS  
 CN Pentanedioic acid, 3-(4-bromophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

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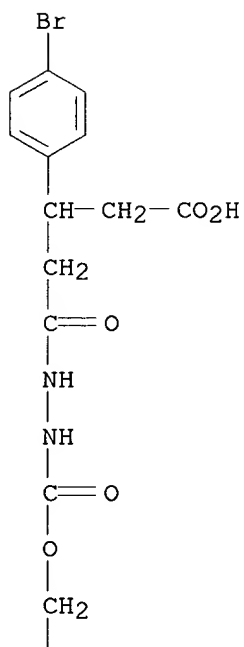


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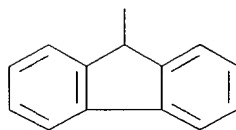


RN 348110-34-9 HCAPLUS  
CN Pentanedioic acid, 3-(4-bromophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A

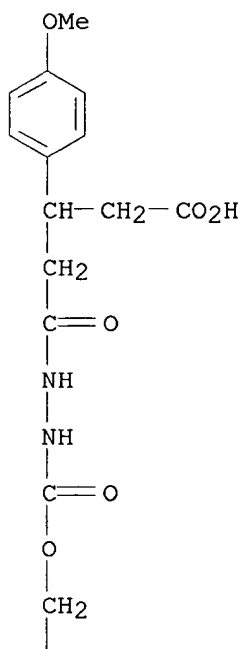


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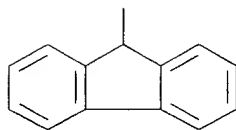


RN 348110-35-0 HCAPLUS  
CN Pentanedioic acid, 3-(4-methoxyphenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

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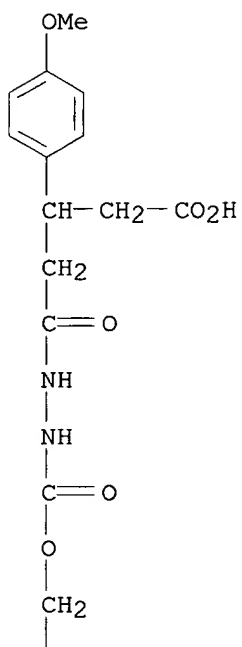
PAGE 2-A



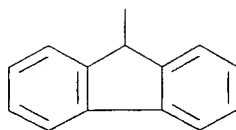
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CN Pentanedioic acid, 3-(4-methoxyphenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)



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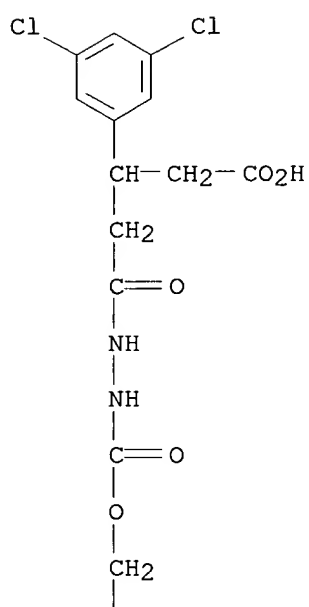


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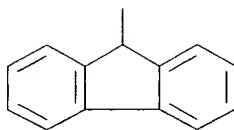


RN 348110-36-1 HCAPLUS  
CN Pentanedioic acid, 3-(3,5-dichlorophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A

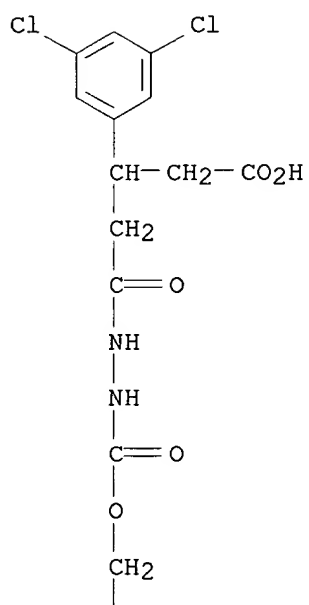


PAGE 2-A

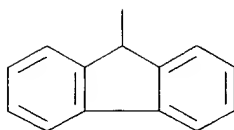


RN 348110-36-1 HCAPLUS  
CN Pentanedioic acid, 3-(3,5-dichlorophenyl)-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

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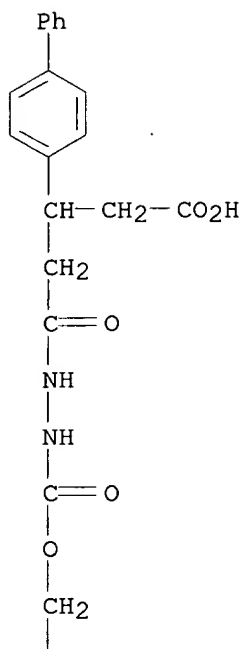


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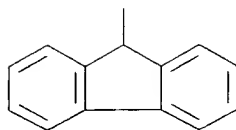


RN 348110-37-2 HCAPLUS  
 CN Pentanedioic acid, 3-[1,1'-biphenyl]-4-yl-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

PAGE 1-A

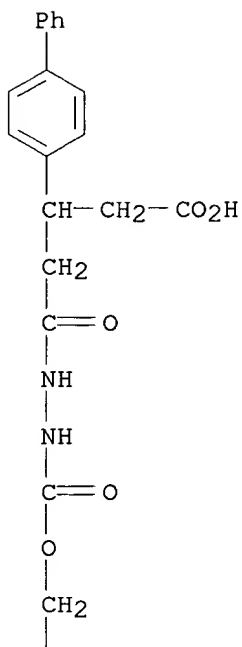


PAGE 2-A

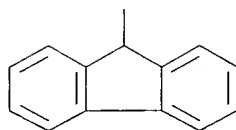


RN 348110-37-2 HCAPLUS  
 CN Pentanedioic acid, 3-[1,1'-biphenyl]-4-yl-, 1-[2-[(9H-fluoren-9-ylmethoxy)carbonyl]hydrazide] (9CI) (CA INDEX NAME)

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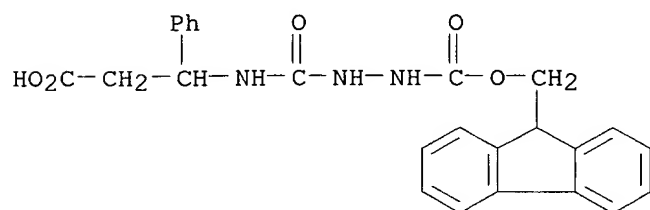


PAGE 2-A



RN 348110-40-7 HCAPLUS

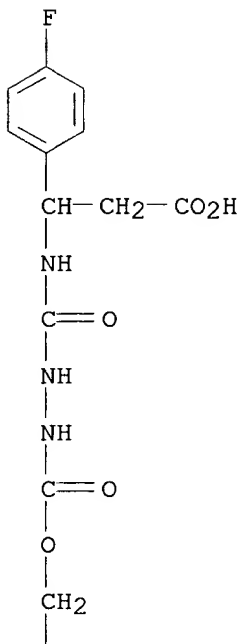
CN Hydrazinecarboxylic acid, 2-[[[2-carboxy-1-phenylethyl]amino]carbonyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)



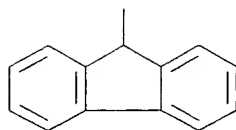
RN 348110-41-8 HCAPLUS

CN Hydrazinecarboxylic acid, 2-[[[2-carboxy-1-(4-fluorophenyl)ethyl]amino]carbonyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

PAGE 1-A

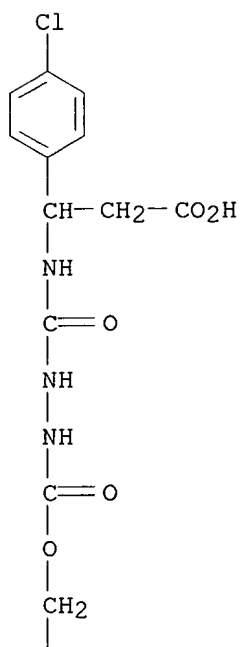


PAGE 2-A

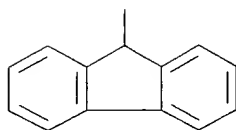


RN 348110-42-9 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-[[[2-carboxy-1-(4-chlorophenyl)ethyl]amino]carbonyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI)  
(CA INDEX NAME)

PAGE 1-A

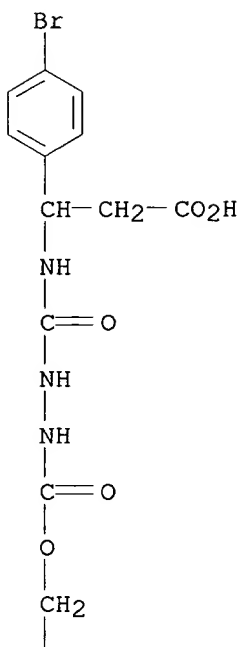


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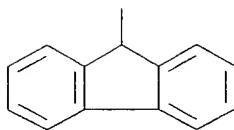


RN 348110-43-0 HCAPLUS  
CN Hydrazinecarboxylic acid, 2-[[[1-(4-bromophenyl)-2-carboxyethyl]amino]carbonyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

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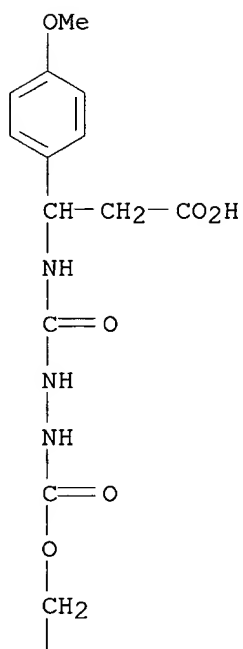
PAGE 2-A



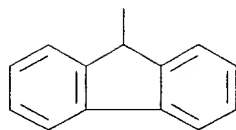
RN 348110-44-1 HCAPLUS  
 CN Hydrazinecarboxylic acid, 2-[[[2-carboxy-1-(4-methoxyphenyl)ethyl]amino]carbonyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)



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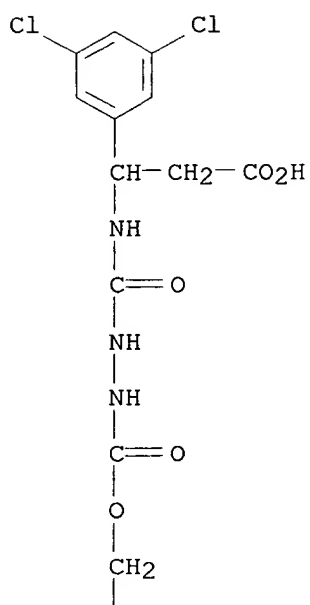


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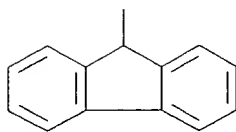


RN 348110-45-2 HCAPLUS  
 CN Hydrazinecarboxylic acid, 2-[[[2-carboxy-1-(3,5-dichlorophenyl)ethyl]amino]carbonyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

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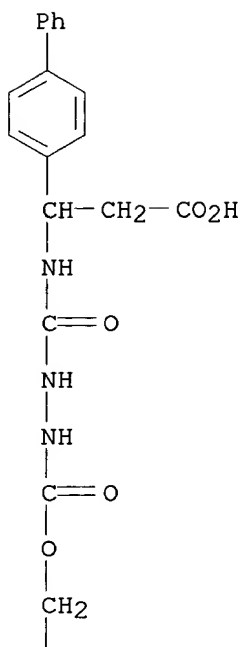


PAGE 2-A

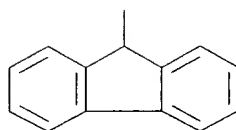


RN 348110-46-3 HCAPLUS  
 CN Hydrazinecarboxylic acid, 2-[[[1-[1,1'-biphenyl]-4-yl-2-carboxyethyl]amino]carbonyl]-, 1-(9H-fluoren-9-ylmethyl) ester (9CI) (CA INDEX NAME)

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CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1

IT **Combinatorial library**  
**Peptidomimetics**  
**Solid phase synthesis**  
 (prepn. of aza-glycine RGD peptidomimetics for use as .alpha.v.beta.3 integrin antagonists via solid-phase combinatorial library methods)

IT 5678-45-5 325-89-3P 1137-61-7P 1141-24-8P 3449-63-6P 4160-80-9P  
 4926-12-9P 33868-91-6P 35271-74-0P 53911-68-5P 57171-24-1P  
 101597-48-2P 180181-93-5DP, resin-bound 180181-93-5P 188814-26-8DP,  
 resin-bound 188814-26-8P 188814-36-0DP, resin-bound 188814-36-0P  
 194471-87-9DP, resin-bound 194471-87-9P 269078-76-4DP, resin-bound  
 269078-77-5DP, resin-bound 284492-02-0DP, resin-bound 284492-02-0P  
 287959-61-9P **320727-73-9DP**, resin-bound **320727-73-9P**  
 320727-89-7DP, resin-bound 320727-89-7P 348110-29-2P 348110-30-5P  
 348110-31-6P **348110-32-7DP**, resin-bound **348110-32-7P**  
**348110-33-8DP**, resin-bound **348110-33-8P**  
**348110-34-9DP**, resin-bound **348110-34-9P**  
**348110-35-0DP**, resin-bound **348110-35-0P**  
**348110-36-1DP**, resin-bound **348110-36-1P**

**348110-37-2DP**, resin-bound **348110-37-2P** 348110-38-3P  
 348110-39-4P **348110-40-7DP**, resin-bound **348110-41-8DP**,  
 resin-bound **348110-42-9DP**, resin-bound **348110-43-0DP**,  
 resin-bound **348110-44-1DP**, resin-bound **348110-45-2DP**,  
 resin-bound **348110-46-3DP**, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation)

(prepn. of aza-glycine RGD peptidomimetics for use as .alpha.v.beta.3  
 integrin antagonists via solid-phase combinatorial library methods)

REFERENCE COUNT: 84 THERE ARE 84 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 3 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2001:302707 HCAPLUS

DOCUMENT NUMBER: 135:77829

TITLE: Novel .alpha.-hydroxyethyl-polystyrene,  
 .alpha.-chloroethyl-polystyrene and  
 .alpha.-amino-oxyethyl-polystyrene linkers on the  
 multipin solid support for solid-phase organic  
 synthesis

AUTHOR(S): Bui, Chinh T.; Maeji, N. Joe; Bray, Andrew M.

CORPORATE SOURCE: Mimotopes Pty. Ltd., Clayton, 3168, Australia

SOURCE: Biotechnology and Bioengineering (2001), Volume Date  
 2000-2001, 71(2), 91-93

CODEN: BIBIAU; ISSN: 0006-3592

PUBLISHER: John Wiley & Sons, Inc.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB A simple method for the generation of three novel linkers,  
 .alpha.-hydroxyethyl-polystyrene, .alpha.-chloroethyl-polystyrene and  
 .alpha.-amino-oxyethyl-polystyrene on Multipin supports (SynPhase Crowns)  
 has been developed. Applications of these linkers have been successfully  
 demonstrated for solid-phase synthesis of dipeptide, oxime, and hydroxamic  
 acid compds. in good yields and purities.

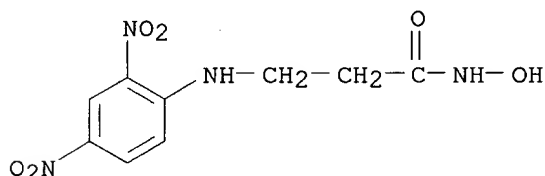
IT **267663-21-8P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(novel .alpha.-hydroxyethyl-polystyrene, .alpha.-chloroethyl-  
 polystyrene and .alpha.-amino-oxyethyl-polystyrene linkers on the  
 multipin solid support for solid-phase org. synthesis)

RN 267663-21-8 HCAPLUS

CN Propanamide, 3-[(2,4-dinitrophenyl)amino]-N-hydroxy- (9CI) (CA INDEX  
 NAME)



CC 38-3 (Plastics Fabrication and Uses)

Section cross-reference(s): 24, 34

IT **Polymer-supported reagents**

**Solid phase synthesis**

(novel .alpha.-hydroxyethyl-polystyrene, .alpha.-chloroethyl-  
 polystyrene and .alpha.-amino-oxyethyl-polystyrene linkers on the

multipin solid support for solid-phase org. synthesis)  
IT 93249-64-0P 189455-66-1P **267663-21-8P**  
RL: SPN (Synthetic preparation); PREP (Preparation)  
      (novel .alpha.-hydroxyethyl-polystyrene, .alpha.-chloroethyl-  
      polystyrene and .alpha.-amino-oxyethyl-polystyrene linkers on the  
      multipin solid support for solid-phase org. synthesis)  
REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS  
RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

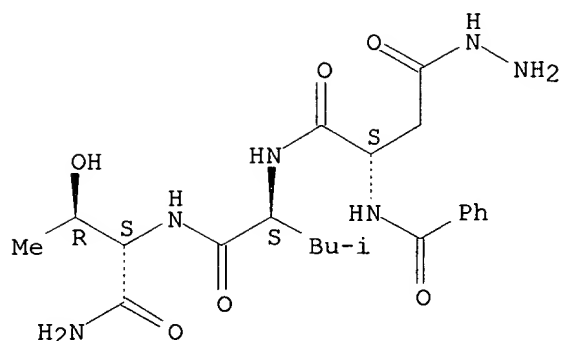
L53 ANSWER 4 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
ACCESSION NUMBER: 2001:167244 HCAPLUS  
DOCUMENT NUMBER: 134:353520  
TITLE: Asparagine surrogates for the assembly of N-linked  
glycopeptide mimetics by chemoselective ligation  
AUTHOR(S): Peluso, S.; Imperiali, B.  
CORPORATE SOURCE: Department of Chemistry, Massachusetts Institute of  
Technology, Cambridge, MA, 02139, USA  
SOURCE: Tetrahedron Letters (2001), 42(11), 2085-2087  
CODEN: TELEAY; ISSN: 0040-4039  
PUBLISHER: Elsevier Science Ltd.  
DOCUMENT TYPE: Journal  
LANGUAGE: English  
OTHER SOURCE(S): CASREACT 134:353520  
GI

\* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT \*

AB Alanine-.beta.-hydroxylamine (A.beta.x) and alanine-.beta.-hydrazide  
(A.beta.z) are synthesized as asparagine surrogates for the assembly of  
N-linked glycopeptide mimetics by chemoselective ligation. A.beta.x and  
A.beta.z are incorporated, resp., in peptides I and II, mimetics for  
substrates of oligosaccharyl transferase. I and II are coupled with  
2-acetylamino-2-deoxy-D-glucose to afford the N-glycopeptide mimetics III  
and IV.

IT **338981-56-9P**  
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)  
      (solid-phase synthesis of glycopeptides contg. N-linked asparagine  
      surrogates)  
RN 338981-56-9 HCAPLUS  
CN L-Threoninamide, N-benzoyl-L-.alpha.-aspartyl-L-leucyl-, hydrazide (9CI)  
(CA INDEX NAME)

Absolute stereochemistry.



CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 7, 33

IT **Peptidomimetics**

(glyco-; solid-phase synthesis of glycopeptides contg. N-linked asparagine surrogates)

IT **Solid phase synthesis**

(solid-phase synthesis of glycopeptides contg. N-linked asparagine surrogates)

IT 338981-55-8P **338981-56-9P** 338981-59-2P 338981-60-5P

338981-61-6P 338981-62-7P 338981-63-8P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(solid-phase synthesis of glycopeptides contg. N-linked asparagine surrogates)

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 5 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:508628 HCAPLUS

DOCUMENT NUMBER: 133:266558

TITLE: Solid-phase synthesis of an arylsulfone hydroxamate library

AUTHOR(S): Salvino, J. M.; Mathew, R.; Kiesow, T.; Narensingh, R.; Mason, H. J.; Dodd, A.; Groneberg, R.; Burns, C. J.; McGeehan, G.; Kline, J.; Orton, E.; Tang, S.-Y.; Morrisette, M.; Labaudininiere, R.

CORPORATE SOURCE: Rhone Poulenc Rorer, Lead Discovery and Medicinal Chemistry Departments, Collegeville, PA, 19426, USA

SOURCE: Bioorganic & Medicinal Chemistry Letters (2000), 10(15), 1637-1640

CODEN: BMCLE8; ISSN: 0960-894X

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

LANGUAGE: English

AB An arylsulfone hydroxamate library of MMP and PDE4 inhibitors was prepd. by solid-phase synthesis. Both the hydroxamic acids and their intermediate carboxylic acids were available for screening. Biol. data could be generated directly from the library compds. without extensive purifn. Sme of the hydroxamic acids selectively inhibited the metalloproteinases and structure-activity relationships were developed.

IT **193546-96-2P 193546-98-4P 193546-99-5P**

**193547-00-1P 193547-37-4P 193547-39-6P**

**193547-40-9P 193547-59-0P 193547-90-9P**

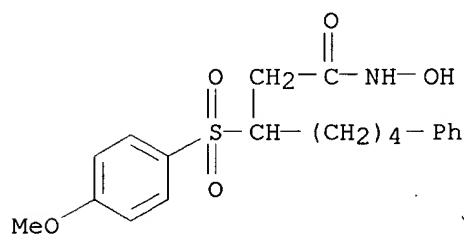
193548-52-6P 193548-54-8P 193548-63-9P  
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 211097-45-9P 211097-47-1P 211097-48-2P  
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 298705-95-0P 298705-96-1P 298705-97-2P  
 298705-98-3P 298705-99-4P 298706-00-0P  
 298706-01-1P 298706-02-2P 298706-03-3P  
 298706-04-4P 298706-05-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(solid-phase synthesis of an aryl sulfone hydroxamate library of MMP and PDE4 inhibitors)

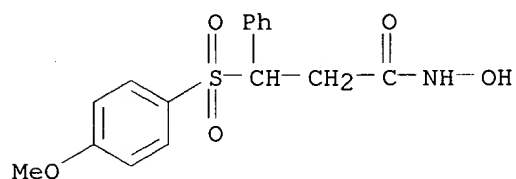
RN 193546-96-2 HCAPLUS

CN Benzenheptanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]- (9CI)  
 (CA INDEX NAME)



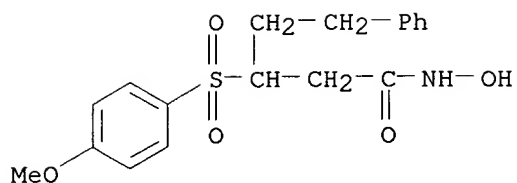
RN 193546-98-4 HCAPLUS

CN Benzenepropanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]- (9CI)  
 (CA INDEX NAME)



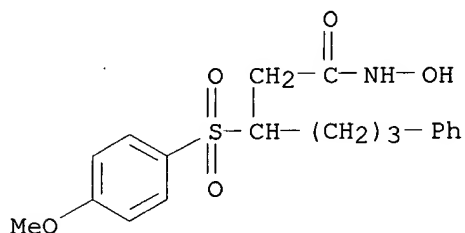
RN 193546-99-5 HCAPLUS

CN Benzenepentanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]- (9CI)  
 (CA INDEX NAME)



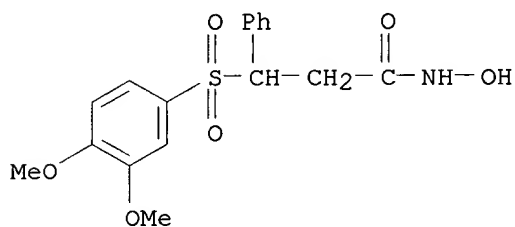
RN 193547-00-1 HCAPLUS

CN Benzenehexanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]- (9CI)  
(CA INDEX NAME)



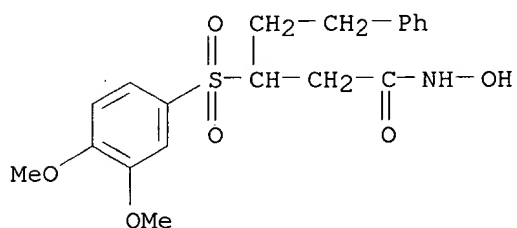
RN 193547-37-4 HCAPLUS

CN Benzenepropanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy-  
(9CI) (CA INDEX NAME)



RN 193547-39-6 HCAPLUS

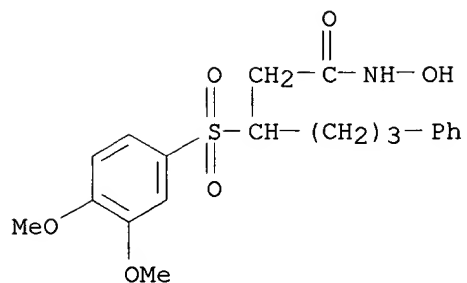
CN Benzenepentanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy-  
(9CI) (CA INDEX NAME)



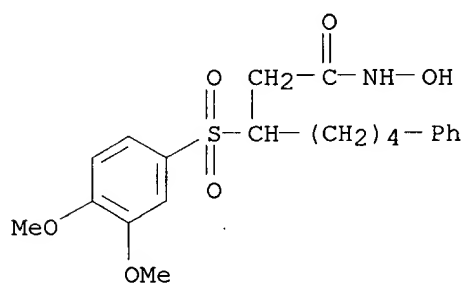
RN 193547-40-9 HCAPLUS

CN Benzenehexanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy- (9CI)  
(CA INDEX NAME)

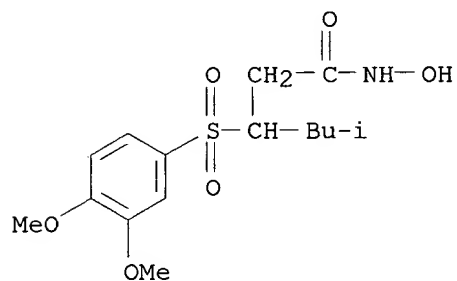




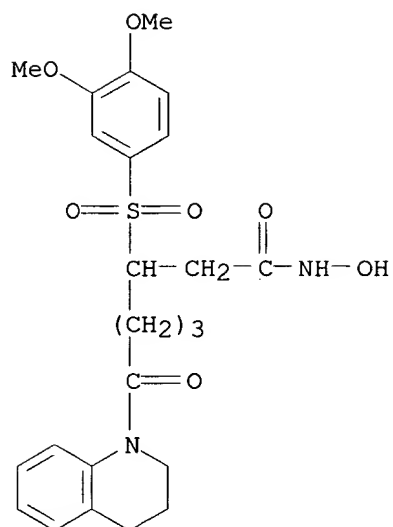
RN 193547-59-0 HCAPLUS  
 CN Benzeneheptanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy-  
 (9CI) (CA INDEX NAME)



RN 193547-90-9 HCAPLUS  
 CN Hexanamide, 3-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy-5-methyl- (9CI)  
 (CA INDEX NAME)

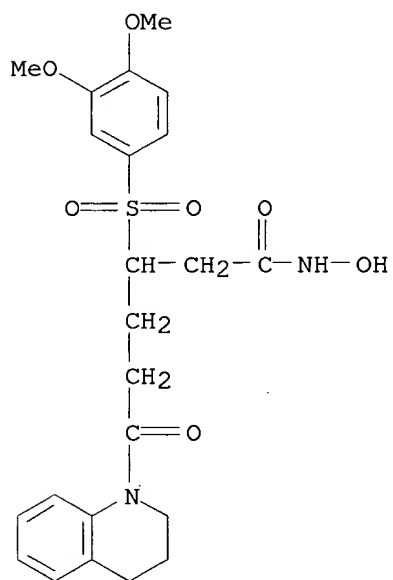


RN 193548-52-6 HCAPLUS  
 CN 1(2H)-Quinolineheptanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-3,4-  
 dihydro-N-hydroxy-.zeta.-oxo- (9CI) (CA INDEX NAME)



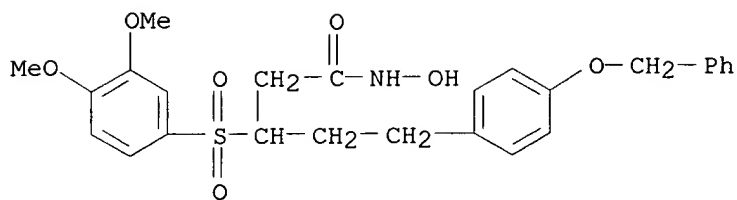
RN 193548-54-8 HCAPLUS

CN 1(2H)-Quinolinehexanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-3,4-dihydro-N-hydroxy-.epsilon.-oxo- (9CI) (CA INDEX NAME)



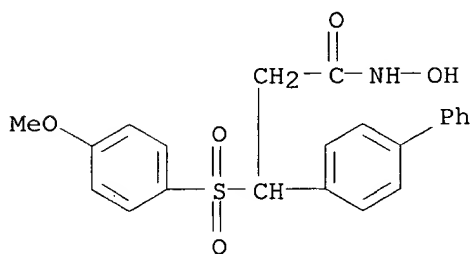
RN 193548-63-9 HCAPLUS

CN Benzenepentanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)



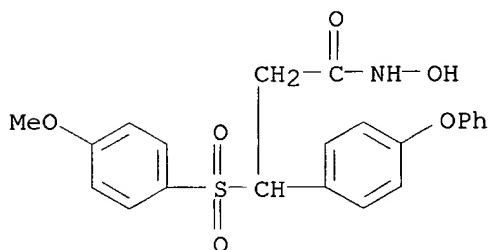
RN 193548-89-9 HCAPLUS

CN [1,1'-Biphenyl]-4-propanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



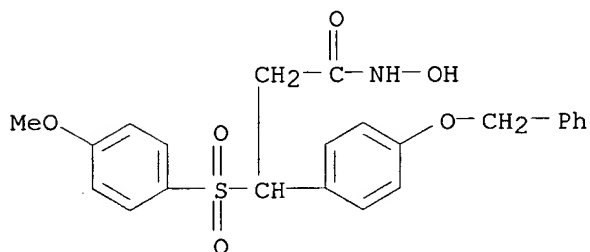
RN 193550-79-7 HCAPLUS

CN Benzenepropanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]-4-phenoxy- (9CI) (CA INDEX NAME)



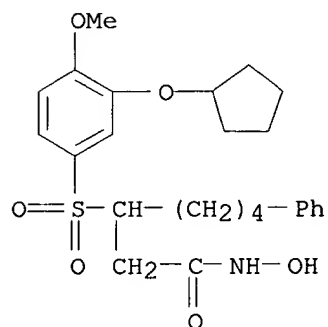
RN 193550-80-0 HCAPLUS

CN Benzenepropanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)



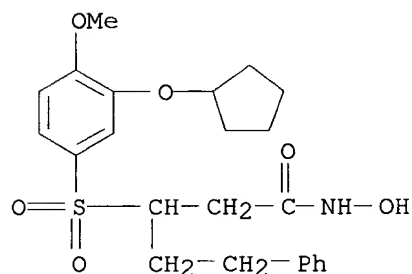
RN 211097-40-4 HCAPLUS

CN Benzenheptanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy- (9CI) (CA INDEX NAME)



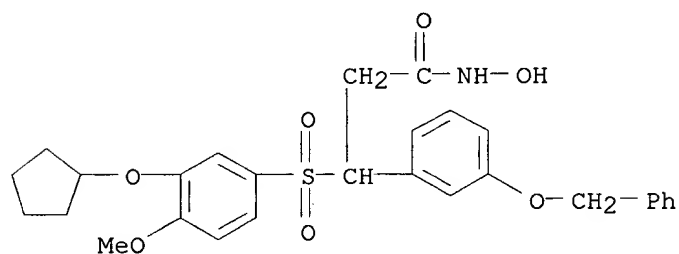
RN 211097-41-5 HCAPLUS

CN Benzenepentanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy- (9CI) (CA INDEX NAME)



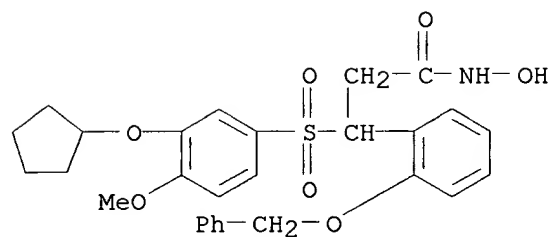
RN 211097-44-8 HCAPLUS

CN Benzenepropanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-3-(phenylmethoxy)- (9CI) (CA INDEX NAME)



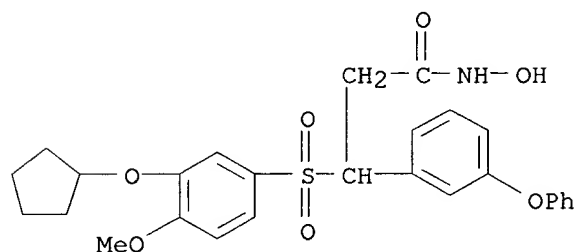
RN 211097-45-9 HCAPLUS

CN Benzenepropanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-2-(phenylmethoxy)- (9CI) (CA INDEX NAME)



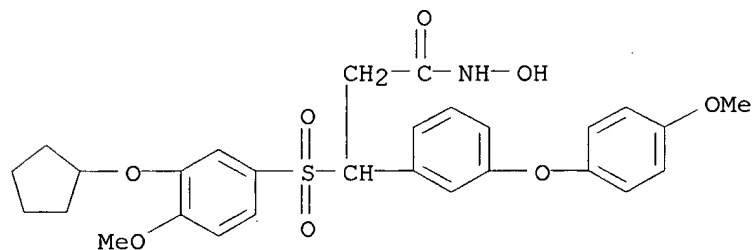
RN 211097-47-1 HCAPLUS

CN Benzenepropanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-3-phenoxy- (9CI) (CA INDEX NAME)



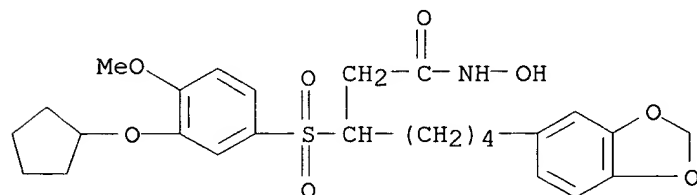
RN 211097-48-2 HCAPLUS

CN Benzenepropanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-3-(4-methoxyphenoxy)- (9CI) (CA INDEX NAME)



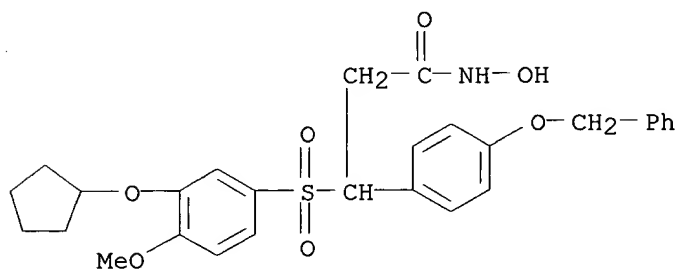
RN 211097-49-3 HCAPLUS

CN 1,3-Benzodioxole-5-heptanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy- (9CI) (CA INDEX NAME)



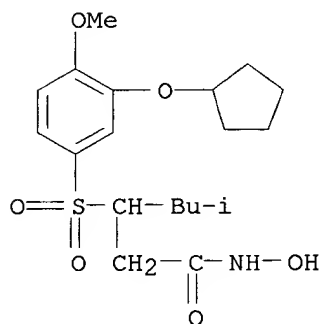
RN 211097-50-6 HCAPLUS

CN Benzenepropanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)



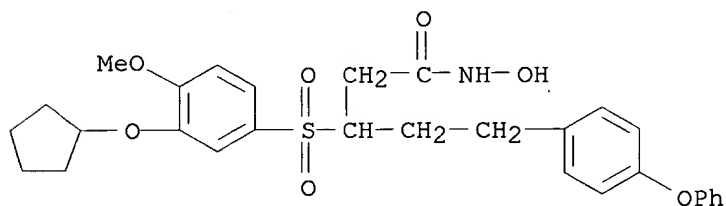
RN 211097-51-7 HCAPLUS

CN Hexanamide, 3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-5-methyl- (9CI) (CA INDEX NAME)



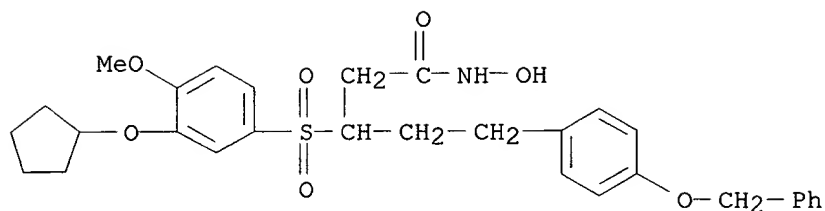
RN 211097-53-9 HCAPLUS

CN Benzenepentanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-4-phenoxy- (9CI) (CA INDEX NAME)

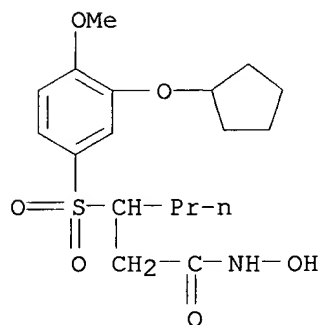


RN 211097-54-0 HCAPLUS

CN Benzenepentanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-4-(phenylmethoxy)- (9CI) (CA INDEX NAME)

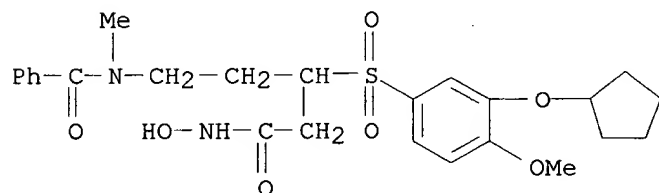


RN 211097-55-1 HCAPLUS

CN Hexanamide, 3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-  
(9CI) (CA INDEX NAME)

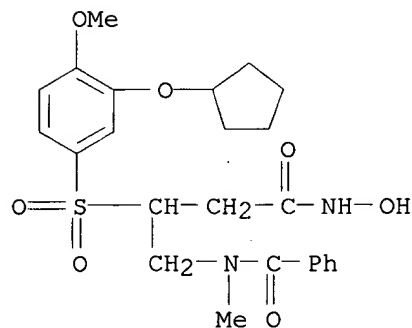
RN 211097-60-8 HCAPLUS

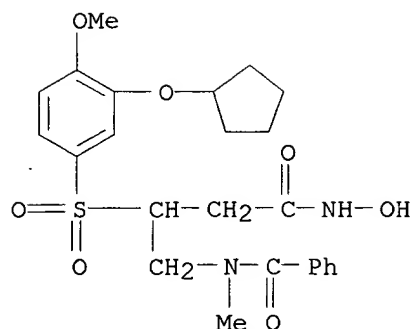
CN Benzamide, N-[3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-5-(hydroxyamino)-5-oxopentyl]-N-methyl- (9CI) (CA INDEX NAME)



RN 211097-61-9 HCAPLUS

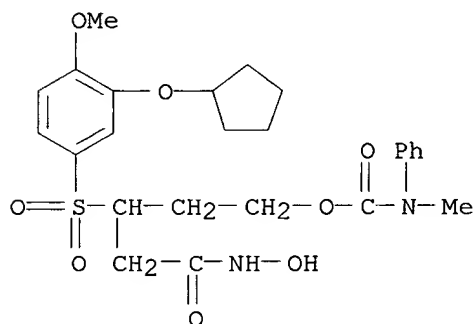
CN Benzamide, N-[2-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-4-(hydroxyamino)-4-oxobutyl]-N-methyl- (9CI) (CA INDEX NAME)





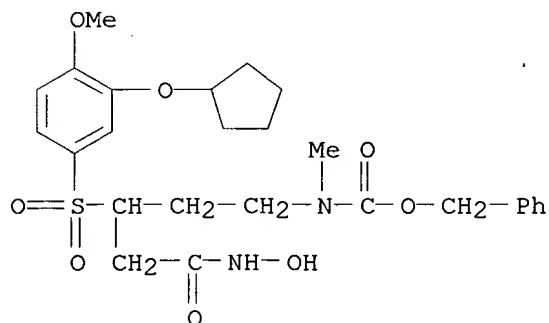
RN 211097-62-0 HCAPLUS

CN Carbamic acid, methylphenyl-, 3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-5-(hydroxyamino)-5-oxopentyl ester (9CI) (CA INDEX NAME)



RN 211097-63-1 HCAPLUS

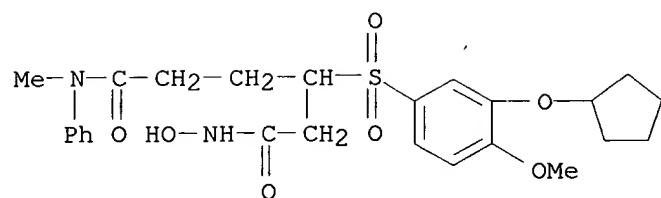
CN Carbamic acid, [3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-5-(hydroxyamino)-5-oxopentyl]methyl-, phenylmethyl ester (9CI) (CA INDEX NAME)



RN 211097-64-2 HCAPLUS

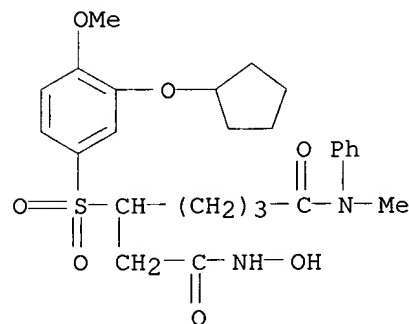
CN Hexanediamide, 3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N1-hydroxy-N6-methyl-N6-phenyl- (9CI) (CA INDEX NAME)





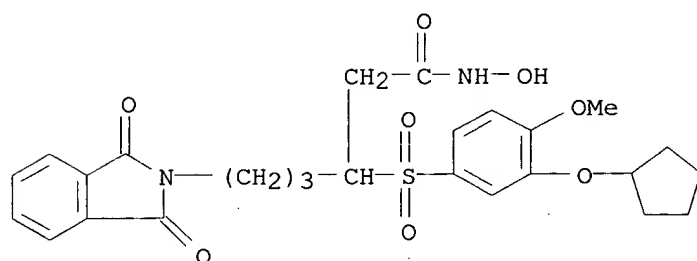
RN 211097-65-3 HCAPLUS

CN Heptanediamide, 3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N1-hydroxy-N7-methyl-N7-phenyl- (9CI) (CA INDEX NAME)



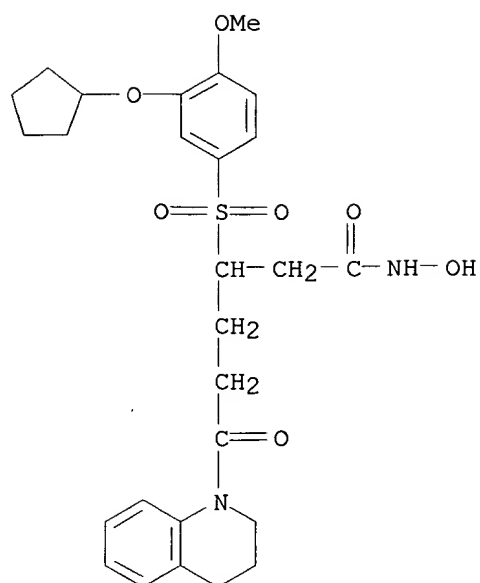
RN 211097-66-4 HCAPLUS

CN 2H-Isoindole-2-hexanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-1,3-dihydro-N-hydroxy-1,3-dioxo- (9CI) (CA INDEX NAME)



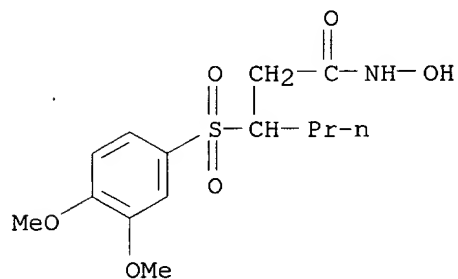
RN 211097-67-5 HCAPLUS

CN 1(2H)-Quinolinehexanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-3,4-dihydro-N-hydroxy-.epsilon.-oxo- (9CI) (CA INDEX NAME)



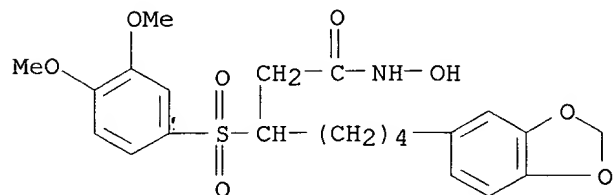
RN 253167-10-1 HCAPLUS

CN Hexanamide, 3-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy- (9CI) (CA INDEX NAME)



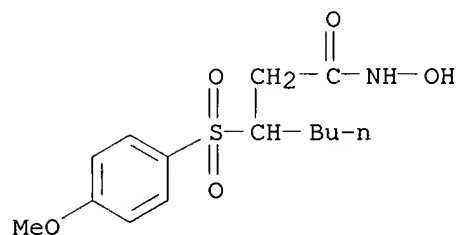
RN 253167-13-4 HCAPLUS

CN 1,3-Benzodioxole-5-heptanamide, .beta.-[(3,4-dimethoxyphenyl)sulfonyl]-N-hydroxy- (9CI) (CA INDEX NAME)

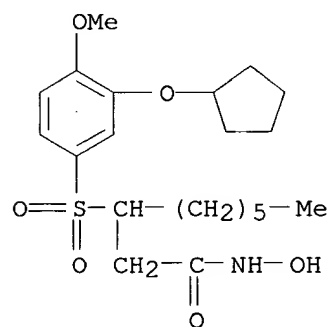


RN 285572-25-0 HCAPLUS

CN Heptanamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)

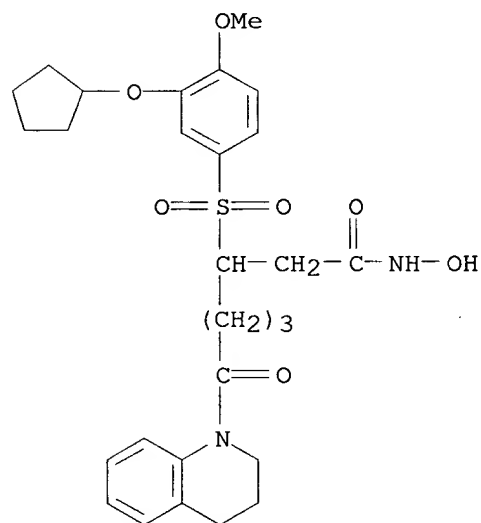


RN 298705-94-9 HCAPLUS

CN Nonanamide, 3-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-N-hydroxy-  
(9CI) (CA INDEX NAME)

RN 298705-95-0 HCAPLUS

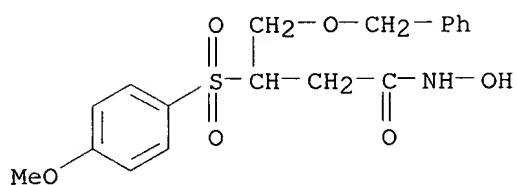
CN 1(2H)-Quinolineheptanamide, .beta.-[[3-(cyclopentyloxy)-4-methoxyphenyl]sulfonyl]-3,4-dihydro-N-hydroxy-.zeta.-oxo- (9CI) (CA INDEX NAME)



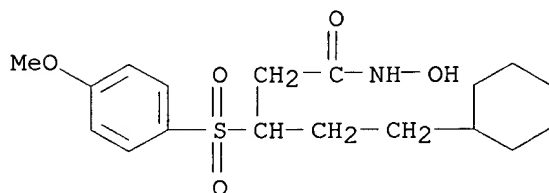
RN 298705-96-1 HCAPLUS

CN Butanamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]-4-(phenylmethoxy)-

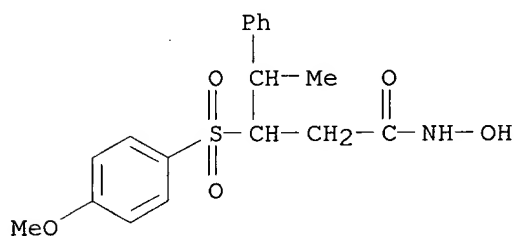
(9CI) (CA INDEX NAME)



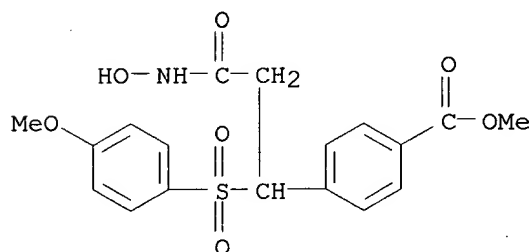
RN 298705-97-2 HCAPLUS

CN Cyclohexanepentanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]-  
(9CI) (CA INDEX NAME)

RN 298705-98-3 HCAPLUS

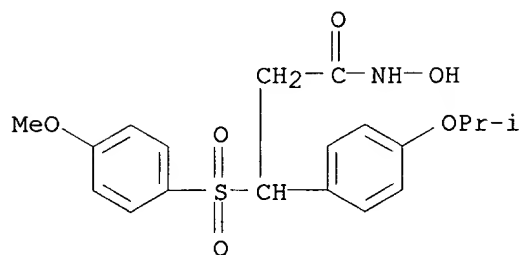
CN Benzenebutanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]-.gamma.-  
methyl- (9CI) (CA INDEX NAME)

RN 298705-99-4 HCAPLUS

CN Benzoic acid, 4-[3-(hydroxyamino)-1-[(4-methoxyphenyl)sulfonyl]-3-  
oxopropyl]-, methyl ester (9CI) (CA INDEX NAME)

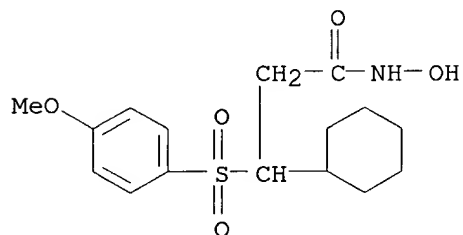
RN 298706-00-0 HCAPLUS

CN Benzenepropanamide, N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]-4-(1-methylethoxy)- (9CI) (CA INDEX NAME)



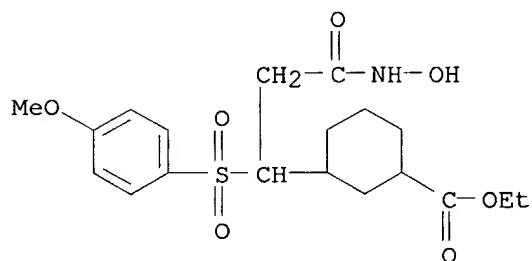
RN 298706-01-1 HCAPLUS

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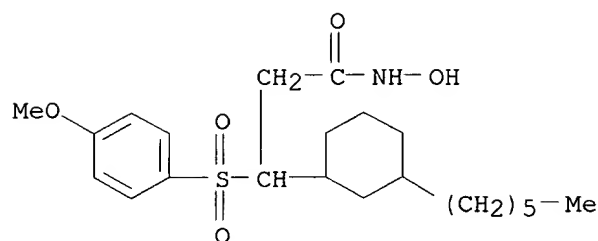
RN 298706-02-2 HCAPLUS

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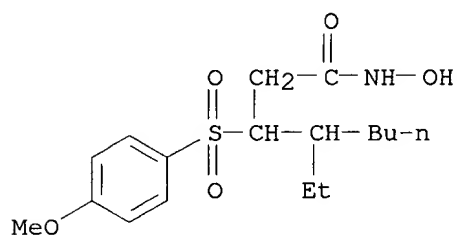
RN 298706-03-3 HCAPLUS

CN Cyclohexanepropanamide, 3-hexyl-N-hydroxy-.beta.-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



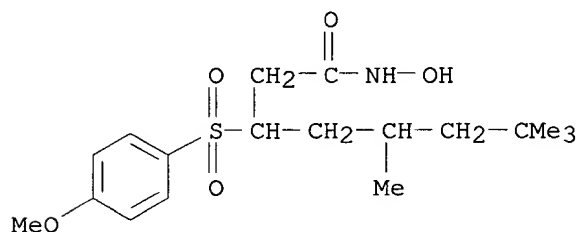
RN 298706-04-4 HCAPLUS

CN Octanamide, 4-ethyl-N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]- (9CI) (CA INDEX NAME)



RN 298706-05-5 HCAPLUS

CN Octanamide, N-hydroxy-3-[(4-methoxyphenyl)sulfonyl]-5,7,7-trimethyl- (9CI) (CA INDEX NAME)



CC 25-12 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
Section cross-reference(s): 1, 7

IT **Combinatorial library**

**Solid phase synthesis**

Structure-activity relationship

(solid-phase synthesis of an aryl sulfone hydroxamate library of MMP and PDE4 inhibitors)

IT 193546-96-2P 193546-98-4P 193546-99-5P  
193547-00-1P 193547-37-4P 193547-39-6P  
193547-40-9P 193547-59-0P 193547-90-9P  
193548-52-6P 193548-54-8P 193548-63-9P  
193548-89-9P 193550-79-7P 193550-80-0P  
211097-40-4P 211097-41-5P 211097-44-8P  
211097-45-9P 211097-47-1P 211097-48-2P  
211097-49-3P 211097-50-6P 211097-51-7P  
211097-53-9P 211097-54-0P 211097-55-1P  
211097-60-8P 211097-61-9P 211097-62-0P

211097-63-1P 211097-64-2P 211097-65-3P  
 211097-66-4P 211097-67-5P 253167-10-1P  
 253167-13-4P 285572-25-0P 298705-94-9P  
 298705-95-0P 298705-96-1P 298705-97-2P  
 298705-98-3P 298705-99-4P 298706-00-0P  
 298706-01-1P 298706-02-2P 298706-03-3P  
 298706-04-4P 298706-05-5P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)

(solid-phase synthesis of an aryl sulfone hydroxamate library of MMP and PDE4 inhibitors)

REFERENCE COUNT: 10 THERE ARE 10 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 6 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:359926 HCAPLUS

DOCUMENT NUMBER: 133:177456

TITLE: 4-Alkoxy-2-hydroxybenzaldehyde (AHB): A Versatile Aldehyde Linker for Solid-Phase Synthesis of C-Terminal Modified Peptides and Peptidomimetics

AUTHOR(S): Okayama, Toru; Burritt, Andrew; Hruby, Victor J.  
 CORPORATE SOURCE: Department of Chemistry, The University of Arizona, Tucson, AZ, 85721, USA

SOURCE: Organic Letters (2000), 2(13), 1787-1790

CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 133:177456

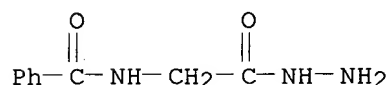
AB A new and versatile 4-alkoxy-2-hydroxybenzaldehyde (AHB) linker for solid-phase syntheses is described. Acylation of the polymer-bound secondary amine obtained from reductive amination of the aldehyde in the AHB linker showed good reactivity. Following acylation of the phenolic OH group, the resulting carboxamide resin was stable to treatment with 95% CF<sub>3</sub>CO<sub>2</sub>H (TFA). The O-acyl functional group was removed with 20% piperidine, and the desired compd. was cleaved from the resin by TFA treatment.

IT 2443-68-7P

RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid-phase synthesis of C-terminal modified peptides and peptidomimetics using alkoxyhydroxybenzaldehyde linker)

RN 2443-68-7 HCAPLUS

CN Glycine, N-benzoyl-, hydrazide (9CI) (CA INDEX NAME)



CC 34-3 (Amino Acids, Peptides, and Proteins)

IT Solid phase synthesis

(peptide; of C-terminal modified peptides and peptidomimetics using alkoxyhydroxybenzaldehyde linker)

IT Peptidomimetics

(solid-phase synthesis of C-terminal modified peptides and

peptidomimetics using alkoxyhydroxybenzaldehyde linker)  
 IT **2443-68-7P** 60889-69-2P 120399-50-0P 288400-83-9P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid-phase synthesis of C-terminal modified peptides and  
 peptidomimetics using alkoxyhydroxybenzaldehyde linker)  
 REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 7 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:227704 HCAPLUS

DOCUMENT NUMBER: 132:251593

TITLE: PEG-based macromonomers, chemically inert polymers  
 prepared therefrom and the use of these polymers for  
 organic synthesis and enzyme reactions

INVENTOR(S): Meldal, Morten; Buchardt, Jens; Rademann, Jorg

PATENT ASSIGNEE(S): Carlsberg A/S, Den.

SOURCE: PCT Int. Appl., 52 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

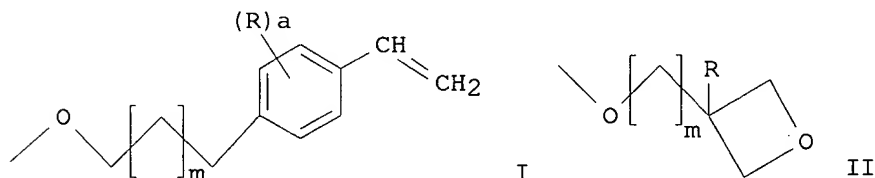
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000018823	A2	20000406	WO 1999-DK508	19990928
WO 2000018823	A3	20000817		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9958498	A1	20000417	AU 1999-58498	19990928
EP 1137690	A2	20011004	EP 1999-945955	19990928
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, MC, IE, SI, LT, LV, FI, RO				
JP 2002525405	T2	20020813	JP 2000-572278	19990928
NO 2001001554	A	20010327	NO 2001-1554	20010327
PRIORITY APPLN. INFO.:			DK 1998-1224	A 19980928
			WO 1999-DK508	W 19990928

GI





AB The present invention relates to macromonomers contg. ethylene glycol repeat units, to chem. inert polymers prepd. therefrom and to the use of such polymers in solid phase biochem. assays and synthesis of peptides (examples given), glycopeptides (an example given) DNA and RNA. The macromonomers of polyethylene glycol have repeat units in the range 6-300 and at least one end terminated by an ether group I ( $m = 0-10$ ,  $a = 1-4$ ,  $R = H$ , alkyl, aryl, or aralkyl) or II ( $m = 1-10$ ,  $R = H$ , alkyl, aryl, or aralkyl). A typical macromonomer was manufd. by stirring PhMe-DMF contg. 10 mmol PEG and 22 mmol K hexamethyldisilazane 15 min, removing the solvents and hexamethyldisilazane, and reacting the resulting PEG K salt with 3-tosyloxymethyl-3-methyloxetane 12 h at 75.degree..

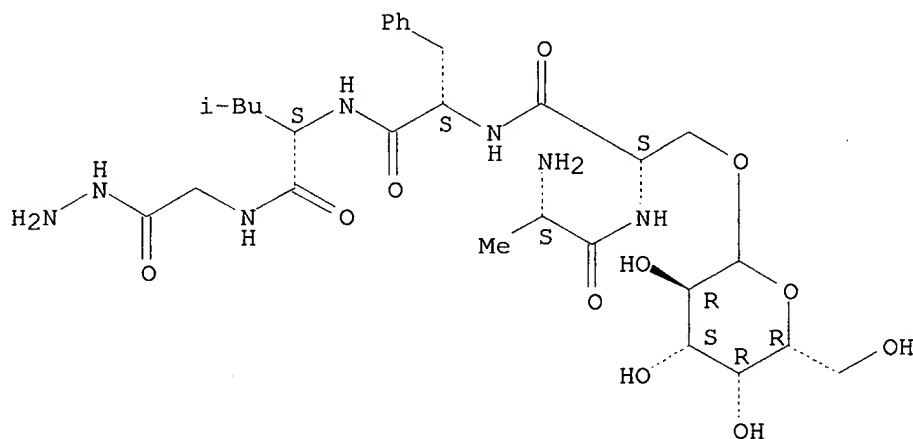
IT **262857-71-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis of peptides using oxetanyl- or vinylphenyl-terminated PEG polymers as the solid support)

RN 262857-71-6 HCAPLUS

CN Glycine, L-alanyl-O-D-galactopyranosyl-L-seryl-L-phenylalanyl-L-leucyl-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



IC ICM C08G065-32

ICS C08G065-26; C08F283-06; C07K001-04

CC 35-8 (Chemistry of Synthetic High Polymers)

Section cross-reference(s): 7, 33, 34

IT **Combinatorial chemistry**

(PEG-based macromonomers having oxetanyl or vinylphenyl terminal groups for manuf. of polymers for combinatorial chem.)

IT **Solid phase synthesis**

(solid-phase synthesis of peptides using oxetanyl- or vinylphenyl-terminated PEG polymers as the solid support)

IT 225528-04-1P 234097-06-4P 234097-07-5DP, dimers 234097-07-5P

234097-15-5P 262857-70-5P **262857-71-6P**

RL: SPN (Synthetic preparation); PREP (Preparation)

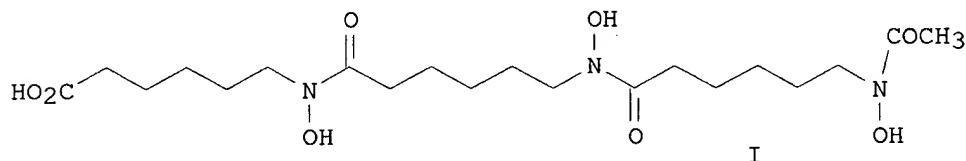
(solid-phase synthesis of peptides using oxetanyl- or vinylphenyl-terminated PEG polymers as the solid support)

L53 ANSWER 8 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 2000:84576 HCAPLUS

DOCUMENT NUMBER: 132:137205  
 TITLE: Preparation of libraries of polyhydroxamates and their analogs with metal-binding affinity  
 INVENTOR(S): Marshall, Garland R.; Rosik, Leonard O.; Schall, Otto F.; Slomczynska, Urszula J.  
 PATENT ASSIGNEE(S): Metaphore, Inc., USA  
 SOURCE: PCT Int. Appl., 164 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000004868	A2	20000203	WO 1999-US16848	19990723
WO 2000004868	A3	20000504		
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
AU 9952295	A1	20000214	AU 1999-52295	19990723
EP 1098659	A2	20010516	EP 1999-937465	19990723
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
JP 2002521319	T2	20020716	JP 2000-560861	19990723
PRIORITY APPLN. INFO.:			US 1998-93883P	P 19980723
			WO 1999-US16848	W 19990723
OTHER SOURCE(S):		MARPAT 132:137205		
GI				



AB A method of synthesizing desired polyhydroxamates and polyhydroxamate analogs of formula  $R_1N(X)C(Z)[(R_2)a(YR_3)b(R_4)cN(X)C(Z)]wR_5$  [ $R_1, R_5 = H$ , alkyl, heteroalkyl, aryl, alkylamino, etc.;  $R_2-R_5 =$  (substituted) alkylidene, (substituted) cycloalkylidene, etc.;  $a, b, c = 0$ , integer;  $w =$  integer;  $X = OH, SH, NH_2, R_1NH$ ;  $Y =$  absent,  $O, S, Se, CH_2, NH, NOH, NNH_2, CO$ , etc.;  $Z = O, NH, S, Se$ ] is described. The method comprises linking a first component of the desired polyhydroxamate or polyhydroxamate analog to a support matrix under conditions effective to form a first matrix-bound intermediate of said desired polyhydroxamate or analog, extending said first matrix-bound intermediate using reagents and reaction conditions effective to form one or more addnl. matrix-bound intermediates

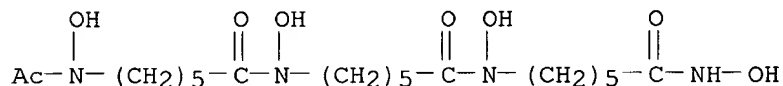
of said desired polyhydroxamate or analog, thereby forming a matrix-bound precursor of the desired polyhydroxamate or polyhydroxamate analog. Protective groups used during synthesis of the precursor are removed and the matrix-bound precursor is cleared from the support matrix, thereby synthesizing the desired polyhydroxamate or polyhydroxamate analog. Methods of making, screening and selecting libraries of candidate polyhydroxamates, the libraries and polyhydroxamates, polyhydroxamate analogs, their intermediates, and methods for using such compds. and their compns. are also disclosed. The polyhydroxamates are useful for therapeutic and non-therapeutic metal-binding applications. Thus, I was prepd. in a solid phase synthesis of a desferrioxamine non-amide analog library and was shown to bind to iron.

IT **256484-10-3P 256484-11-4P**

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of libraries of polyhydroxamates and analogs with metal-binding affinity)

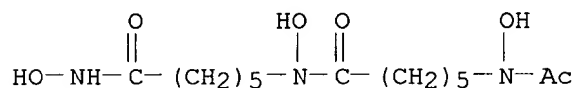
RN 256484-10-3 HCAPLUS

CN Hexanamide, 6-[[6-(acetylhydroxyamino)-1-oxohexyl]hydroxyamino]-N-hydroxy-N-[6-(hydroxyamino)-6-oxohexyl]- (9CI) (CA INDEX NAME)



RN 256484-11-4 HCAPLUS

CN Hexanamide, 6-(acetylhydroxyamino)-N-hydroxy-N-[6-(hydroxyamino)-6-oxohexyl]- (9CI) (CA INDEX NAME)



IC ICM A61K

CC 26-6 (Biomolecules and Their Synthetic Analogs)  
Section cross-reference(s): 1

IT Chelating agents

**Combinatorial library**

Imaging agents

**Solid phase synthesis**

(prepn. of libraries of polyhydroxamates and analogs with metal-binding affinity)

IT	144108-72-5P	256483-67-7P	256483-68-8P	256483-69-9P	256483-70-2P
	256483-71-3P	256483-72-4P	256483-73-5P	256483-74-6P	256483-75-7P
	256483-76-8P	256483-77-9P	256483-78-0P	256483-79-1P	256483-80-4P
	256483-82-6P	256483-83-7P	256483-84-8P	256483-85-9P	256483-86-0P
	256483-87-1P	256483-88-2P	256483-89-3P	256483-90-6P	256483-91-7P
	256483-92-8P	256483-93-9P	256483-94-0P	256483-95-1P	256483-96-2P
	256483-97-3P	256483-98-4P	256483-99-5P	256484-00-1P	256484-01-2P
	256484-02-3P	256484-03-4P	256484-04-5P	256484-05-6P	256484-06-7P
	256484-07-8P	256484-08-9P	256484-09-0P	<b>256484-10-3P</b>	
	<b>256484-11-4P</b>	256484-12-5P	256484-13-6P	256484-14-7P	

256484-17-0P	256484-18-1P	256484-19-2P	256484-20-5P	256484-21-6P
256484-22-7P	256484-23-8P	256484-24-9P	256484-25-0P	256484-26-1P
256484-27-2P	256484-28-3P	256484-29-4P	256484-30-7P	256484-31-8P
256484-32-9P	256484-33-0P	256484-34-1P	256484-35-2P	256484-36-3P
256484-37-4P	256484-38-5P	256484-39-6P	256484-40-9P	256484-41-0P
256484-42-1P	256484-43-2P	256484-44-3P	256484-45-4P	256484-46-5P
256484-47-6P	256484-48-7P	256484-49-8P	256484-50-1P	256484-51-2P
256484-52-3P	256484-53-4P	256484-54-5P	256484-55-6P	256484-56-7P
256484-57-8P	256484-58-9P	256484-59-0P	256484-60-3P	256484-61-4P
256484-62-5P	256484-63-6P	256484-64-7P	256484-65-8P	256484-66-9P
256484-67-0P	256484-68-1P	256484-69-2P	256484-70-5P	256484-71-6P
256484-72-7P	256484-73-8P	256484-74-9P	256484-75-0P	256484-76-1P
256484-77-2P	256484-78-3P	256484-79-4P	256484-80-7P	256484-81-8P
256484-82-9P	256484-83-0P	256484-84-1P	256484-85-2P	256484-86-3P
256484-87-4P	256484-88-5P	256484-89-6P	256484-90-9P	256484-91-0P
256484-92-1P	256484-93-2P	256485-27-5P	256485-28-6P	256485-29-7P
256485-30-0P	256485-31-1P	256485-32-2DP, resin-bound		

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(prepn. of libraries of polyhydroxamates and analogs with metal-binding affinity)

L53 ANSWER 9 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:788495 HCAPLUS

DOCUMENT NUMBER: 132:222836

TITLE: Novel Hydrazino-Carbonyl-Amino-Methylated polystyrene (HCAM) resin methodology for the synthesis of P1-aldehyde protease inhibitor candidates

AUTHOR(S): Siev, Daniel V.; Semple, J. Edward

CORPORATE SOURCE: Department of Medicinal Chemistry, Corvas International Inc., San Diego, CA, 92121, USA

SOURCE: Organic Letters (2000), 2(1), 19-22

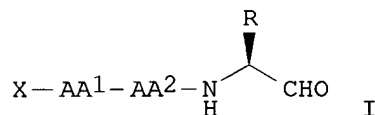
CODEN: ORLEF7; ISSN: 1523-7060

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

GI

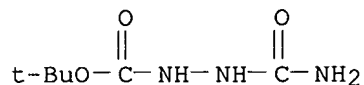


AB A new strategy for the synthesis of peptidyl and peptidomimetic aldehydes I [X = Cbz, PhCH<sub>2</sub>SO<sub>2</sub>, PhCO, MeCO; AA<sup>1</sup> = homoGlu, Asp; AA<sup>2</sup> = Sar, Nva; AA<sup>1</sup>AA<sup>2</sup> = 3(S)-amino-2-oxo-1-piperidinoacetyl; R = (CH<sub>2</sub>)<sub>3</sub>NHC(:NH)NH<sub>2</sub>, CH<sub>2</sub>C.tplbond.CH, CH<sub>2</sub>CH:CH<sub>2</sub>, CH<sub>2</sub>SMe] on HCAM solid support is described. The appropriate C-terminal aldehyde precursors were prepd. and anchored to a resin support via a semicarbazone linkage (HCAM resin). After synthetic elaboration, acidic hydrolysis efficiently delivered I in good overall yields and in excellent purity.

IT 64512-93-2DP, aminomethylpolystyrene resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT

(Reactant or reagent)  
 (using polystyrene (HCAM) resin methodol. to prep. peptidyl P1-aldehyde  
 scaffolds as possible protease inhibitors)  
 RN 64512-93-2 HCAPLUS  
 CN Hydrazinecarboxylic acid, 2-(aminocarbonyl)-, 1,1-dimethylethyl ester  
 (9CI) (CA INDEX NAME)



CC 34-3 (Amino Acids, Peptides, and Proteins)  
 IT **Peptidomimetics**  
**Solid phase synthesis**  
 (using polystyrene (HCAM) resin methodol. to prep. peptidyl P1-aldehyde  
 scaffolds as possible protease inhibitors)  
 IT 57-56-7DP, Hydrazinecarboxamide, aminomethylpolystyrene resin-bound  
**64512-93-2DP**, aminomethylpolystyrene resin-bound 261163-21-7P  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
 (Reactant or reagent)  
 (using polystyrene (HCAM) resin methodol. to prep. peptidyl P1-aldehyde  
 scaffolds as possible protease inhibitors)  
 REFERENCE COUNT: 41 THERE ARE 41 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 10 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:723015 HCAPLUS

DOCUMENT NUMBER: 131:322926

TITLE: Methods for solid-phase synthesis of hydroxylamine  
 compounds and derivatives and combinatorial libraries

INVENTOR(S): Patel, Dinesh V.; Ngu, Khehyong

PATENT ASSIGNEE(S): Versicor, Inc., USA

SOURCE: PCT Int. Appl., 122 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 3

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9957097	A2	19991111	WO 1999-US9996	19990506
WO 9957097	A3	20000309		
W:	AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZA, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
RW:	GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG			
US 6281245	B1	20010828	US 1998-74035	19980506
AU 9939748	A1	19991123	AU 1999-39748	19990506
PRIORITY APPLN. INFO.:			US 1998-74035	A 19980506

US 1996-29788P	P 19961028
US 1997-47468P	P 19970523
US 1997-958638	A2 19971027
WO 1999-US9996	W 19990506

OTHER SOURCE(S): MARPAT 131:322926

AB Hydroxylamine compds. HONHCOCH<sub>2</sub>CH(CH<sub>2</sub>CH<sub>2</sub>-X-Me)CO-L10-CO-R<sub>2</sub> [X = CH<sub>2</sub>, S; L10 = NHCHMe, NHCH(Bu-i), NHCH(CH<sub>2</sub>)Ph and related residues of optically active amino acids; R<sub>2</sub> = NH<sub>2</sub>, piperidino, morpholino, 4-methylpiperazino, etc.] and all stereoisomers, protected derivs., and salts were prepd. Techniques of combinatorial chem. can be applied to immobilized alkoxyamines to generate a diverse set of compds. Thus, (S,S)-HONHCOCH<sub>2</sub>CH(CH<sub>2</sub>CH<sub>2</sub>SMe)CONHCH(Bu-i)CONHC<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-p was prepd. and assayed for peptide deformylase and antimicrobial activities [IC<sub>50</sub> = 11 nM and 64 .mu.M/mL (S. aureus), resp.].

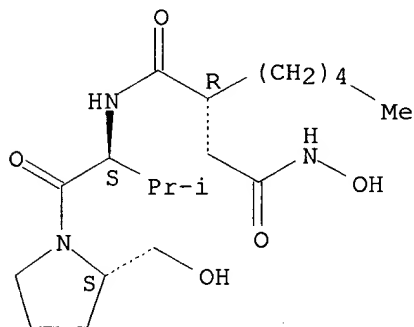
IT 13434-13-4P 249535-65-7P 249535-67-9P  
249535-68-0P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)  
(solid-phase synthesis of hydroxylamine compds. and derivs. and combinatorial libraries)

RN 13434-13-4 HCAPLUS

CN Butanediamide, N4-hydroxy-N1-[(1S)-1-[(2S)-2-(hydroxymethyl)-1-pyrrolidinyl]carbonyl]-2-methylpropyl]-2-pentyl-, (2R)- (9CI) (CA INDEX NAME)

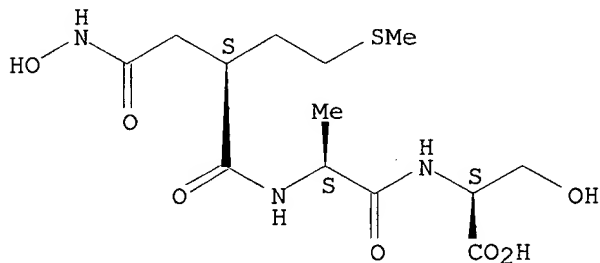
Absolute stereochemistry. Rotation (-).

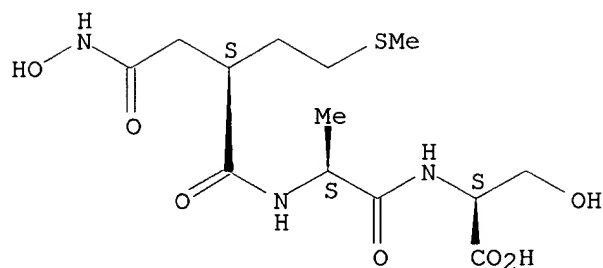


RN 249535-65-7 HCAPLUS

CN L-Serine, N-[(2S)-4-(hydroxyamino)-2-[2-(methylthio)ethyl]-1,4-dioxobutyl]-L-alanyl- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

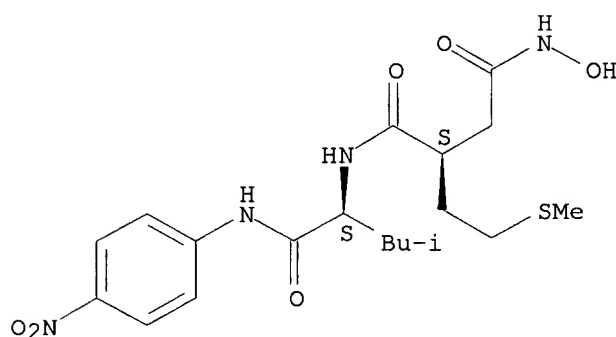




RN 249535-67-9 HCAPLUS

CN Butanedi-2-yl-N4-hydroxy-N1-[(1S)-3-methyl-1-[[4-nitrophenyl]amino]carbonyl]butyl]-2-[2-(methylthio)ethyl]-, (2S)- (9CI)  
(CA INDEX NAME)

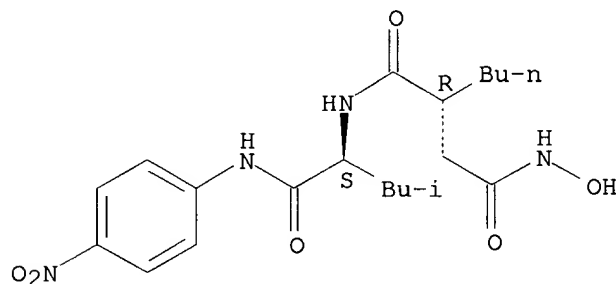
Absolute stereochemistry.



RN 249535-68-0 HCAPLUS

CN Butanedi-2-yl-N4-hydroxy-N1-[(1S)-3-methyl-1-[[4-nitrophenyl]amino]carbonyl]butyl]-, (2R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

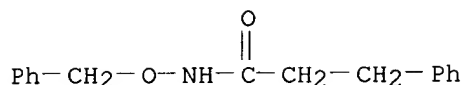


IT 22426-87-5P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)  
(solid-phase synthesis of hydroxylamine compds. and derivs. and combinatorial libraries)

RN 22426-87-5 HCAPLUS

CN Benzenepropanamide, N-(phenylmethoxy)- (9CI) (CA INDEX NAME)

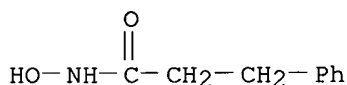


IT 17698-11-2P 56439-40-8P

RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis of hydroxylamine compds. and derivs. and  
combinatorial libraries)

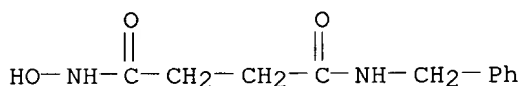
RN 17698-11-2 HCAPLUS

CN Benzenepropanamide, N-hydroxy- (9CI) (CA INDEX NAME)



RN 56439-40-8 HCAPLUS

CN Butanediamide, N-hydroxy-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)



IC ICM C07C259-06

ICS A61K031-16

CC 34-3 (Amino Acids, Peptides, and Proteins)

Section cross-reference(s): 1, 10

IT Antibacterial agents

**Combinatorial library****Solid phase synthesis**(solid-phase synthesis of hydroxylamine compds. and derivs. and  
combinatorial libraries)

IT 13434-13-4P 249535-65-7P 249535-67-9P

249535-68-0P 249535-69-1P 249535-70-4P

RL: BAC (Biological activity or effector, except adverse); BSU (Biological  
study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use);  
BIOL (Biological study); PREP (Preparation); USES (Uses)(solid-phase synthesis of hydroxylamine compds. and derivs. and  
combinatorial libraries)

IT 2687-43-6P, o-Benzylhydroxylamine hydrochloride 22426-87-5P

27079-92-1DP, resin-bound 32391-97-2P 143965-32-6P 197304-22-6P

197304-23-7P 197304-24-8DP, resin-bound 197304-24-8P 197304-25-9DP,

resin-bound 197304-25-9P 200866-59-7P 200866-61-1P 249535-71-5P

249535-72-6P 249535-73-7P 249535-76-0P 249535-77-1DP, resin-bound

249535-78-2DP, resin-bound

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT  
(Reactant or reagent)(solid-phase synthesis of hydroxylamine compds. and derivs. and  
combinatorial libraries)

IT 17698-11-2P 56439-40-8P 153720-65-1P 161313-73-1P

161314-70-1P 193807-79-3P 207462-42-8P 249535-74-8P 249535-75-9P



RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid-phase synthesis of hydroxylamine compds. and derivs. and  
combinatorial libraries)

L53 ANSWER 11 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:451277 HCAPLUS

DOCUMENT NUMBER: 131:87512

TITLE: Solid-support synthesis of hydroxamic acids using  
resins with oxime moieties

INVENTOR(S): Golebiowski, Adam; Klopfenstein, Sean Rees

PATENT ASSIGNEE(S): The Procter & Gamble Company, USA

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9935126	A1	19990715	WO 1998-IB2117	19981228
W: AU, CA, IL, JP, NO, NZ, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2318487	AA	19990715	CA 1998-2318487	19981228
AU 9915029	A1	19990726	AU 1999-15029	19981228
EP 1045831	A1	20001025	EP 1998-959113	19981228
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI				
JP 2002500216	T2	20020108	JP 2000-527528	19981228
US 6291709	B1	20010918	US 2000-582975	20000707
NO 2000003541	A	20000831	NO 2000-3541	20000710
PRIORITY APPLN. INFO.:			US 1998-70980P	P 19980109
			WO 1998-IB2117	W 19981228

OTHER SOURCE(S): CASREACT 131:87512

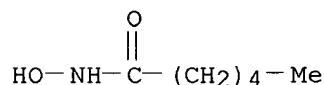
AB Hydroxamic acids are prepd. in high yield and selectivity using a solid-support resin having an oxime moiety as the linking moiety [where the functional moiety attached to the polymer backbone is 4-C<sub>6</sub>H<sub>4</sub>C(:NOH)C<sub>6</sub>H<sub>4</sub>NO<sub>2</sub>-4'] by: (A) condensing the resin with a carboxylic acid (e.g., 2-furoic acid) to form a bound oxime ester; (B) optionally modifying the side chain; (C) cleaving a product from the resin by reaction with Me<sub>3</sub>CSi(Me)<sub>2</sub>ONH<sub>2</sub>; (D) optionally modifying the side chain; and (E) optionally treating the resulting O-TBS-protected material RCONHOSi(Me)<sub>2</sub>CMe<sub>3</sub> (R = 2-furyl) with acid (e.g., trifluoroacetic acid) to produce an unprotected hydroxamic acid RCONHOH.

IT **4312-93-0P 10335-80-5P**

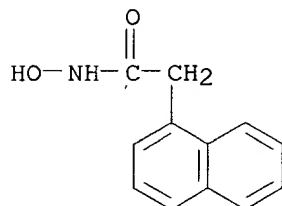
RL: SPN (Synthetic preparation); PREP (Preparation)  
(solid-support synthesis of hydroxamic acids using resins with oxime  
moieties)

RN 4312-93-0 HCAPLUS

CN Hexanamide, N-hydroxy- (9CI) (CA INDEX NAME)



RN 10335-80-5 HCAPLUS  
 CN 1-Naphthaleneacetamide, N-hydroxy- (9CI) (CA INDEX NAME)



IC ICM C07C259-04  
 CC 21-2 (General Organic Chemistry)  
 Section cross-reference(s): 27  
 IT **Solid phase synthesis**  
 (solid-support synthesis of hydroxamic acids using resins with oxime moieties)  
 IT **Combinatorial library**  
 (solid-support synthesis of hydroxamic acids using resins with oxime moieties in prepn. of)  
 IT **4312-93-0P** 6953-61-3P **10335-80-5P** 10507-69-4P  
 17698-14-5P 31982-81-7P 208924-63-4P 208924-64-5P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid-support synthesis of hydroxamic acids using resins with oxime moieties)  
 REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 12 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1999:222923 HCAPLUS  
 DOCUMENT NUMBER: 130:252372  
 TITLE: Preparation of cyclic compounds as protecting and linking groups for organic synthesis.  
 INVENTOR(S): Toth, Istvan; Dekany, Gyula; Kellam, Barry  
 PATENT ASSIGNEE(S): Alchemia Pty. Ltd., Australia  
 SOURCE: PCT Int. Appl., 68 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 1  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9915510	A1	19990401	WO 1998-AU808	19980924
W: AU, CA, CN, HU, JP, US				
RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE				
CA 2304061	AA	19990401	CA 1998-2304061	19980924
AU 9893303	A1	19990412	AU 1998-93303	19980924
EP 1017683	A1	20000712	EP 1998-946145	19980924
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 2001517660	T2	20011009	JP 2000-512818	19980924
PRIORITY APPLN. INFO.:			AU 1997-9375	A 19970924

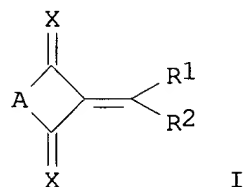
US 1997-61987P P 19971014

WO 1998-AU808 W 19980924

OTHER SOURCE(S):

CASREACT 130:252372; MARPAT 130:252372

GI



AB Title compds. [I; A = atoms to form a (substituted) cycloalkyl, cycloheteroalkyl, bicycyl, heterobicycyl, tricycyl, heterotricycyl; X = O, S, (substituted) imino; R1 = H, (substituted) alkyl, alkenyl, alkynyl, heteroalkyl, aryl, heteroaryl, cycloalkyl, heterocycloalkyl, alkanal, thioalkanal, amino, guanidino, cyano, ammonio, CO<sub>2</sub>H, etc.; R2 = (substituted) alkylamino, dialkylamino, arylamino, diarylamino, O-substituted hydroxylamino, hydrazido, thiohydrazido, semicarbazido, alkoxy, acyloxy, alkylthio, etc.; with a proviso], and related compds. were prepd. as protecting and linking groups for use in the synthesis of peptides, oligosaccharides, glycopeptides and glycolipids. I are useful in both solid phase and soln. synthesis, and are particularly applicable to combinatorial synthesis. Thus, 1,3-dimethylbarbituric acid and 4-dimethylaminopyridine in CH<sub>2</sub>Cl<sub>2</sub> at 0.degree. were treated with PhCOCl over 15 min. followed by 3 h stirring at room temp. to give 64% 5-benzoyl-1,3-dimethyl-2,4,6(1H,3H,5H)-pyrimidinetrione. The latter was refluxed overnight with benzyl 2-amino-2-deoxy-.alpha.-D-glucopyranoside (II) and (Me<sub>2</sub>CH)<sub>2</sub>NEt in EtOH to give 71% benzyl 2-deoxy-2-[1-(1,3-dimethyl-2,4,6(1H,3H,5H)-trioxypyrimidin-5-ylidene)phenylmethylamino]-.alpha.-D-glucopyranoside. The latter was stirred with BuNH<sub>2</sub> for 30 min. to give 92% II.

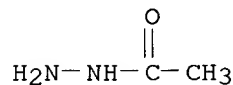
IT **1068-57-1, Acetic hydrazide**

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of cyclic compds. as protecting and linking groups for org. synthesis)

RN 1068-57-1 HCAPLUS

CN Acetic acid, hydrazide (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



IC ICM C07D239-62

ICS C07H001-00; C07H005-06; C07H015-18; C07H015-26; C08J007-16

CC 28-16 (Heterocyclic Compounds (More Than One Hetero Atom))

Section cross-reference(s): 21, 33

IT **Combinatorial chemistry**

Protective groups

**Solid phase synthesis**

(prepn. of cyclic compds. as protecting and linking groups for org.

synthesis)  
 IT 56-40-6, Glycine, reactions 79-11-8, Chloroacetic acid, reactions  
 79-43-6, Dichloroacetic acid, reactions 98-88-4, Benzoyl chloride  
 103-82-2, Phenylacetic acid, reactions 108-24-7 108-55-4, Glutaric  
 anhydride 109-73-9, 1-Butanamine, reactions 117-34-0, Diphenylacetic  
 acid 545-06-2, Trichloroacetonitrile 606-23-5, 1H-Indene-1,3(2H)-dione  
 769-42-6, 1,3-Dimethylbarbituric acid 828-51-3, 1-Adamantanecarboxylic  
 acid **1068-57-1**, Acetic hydrazide 1989-33-9,  
 9-Fluorene-carboxylic acid 3282-30-2, Pivaloyl chloride 221687-47-4  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (prepn. of cyclic compds. as protecting and linking groups for org.  
 synthesis)

REFERENCE COUNT: 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD.. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 13 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1999:59449 HCAPLUS

DOCUMENT NUMBER: 130:125401

TITLE: Solid-phase synthesis of peptidyl trifluoromethyl  
 ketones

AUTHOR(S): Poupart, Marc-Andre; Fazal, Gulrez; Goulet, Sylvie;  
 Mar, Ly Thy

CORPORATE SOURCE: Bio-Mega Research Division, Boehringer Ingelheim  
 (Canada) Ltd., Laval, QC, H7S 2G5, Can.

SOURCE: Journal of Organic Chemistry (1999), 64(4), 1356-1361  
 CODEN: JOCEAH; ISSN: 0022-3263

PUBLISHER: American Chemical Society

DOCUMENT TYPE: Journal

LANGUAGE: English

OTHER SOURCE(S): CASREACT 130:125401

AB The solid-phase prepn. of peptidyl trifluoromethyl ketones using a  
 semicarbazone linker as anchoring point has been described. The chem. is  
 compatible with both N-Boc- and N-Fmoc-protected amino acids and affords  
 the desired compd. in 15-40% overall yield. This methodol. is well suited  
 for application in rapid lead optimization as well as for the generation  
 of libraries directed toward the identification of novel serine protease  
 inhibitors contg. a trifluoromethyl ketone moiety.

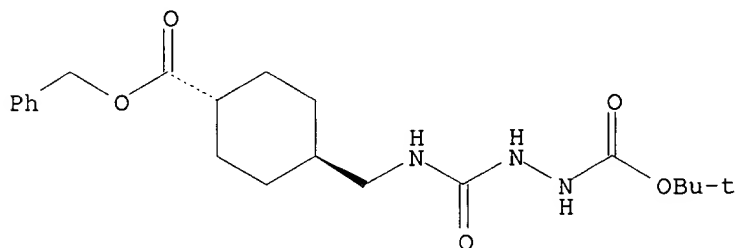
IT **139976-26-4**

RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solid-phase synthesis of peptidyl trifluoromethyl ketones)

RN 139976-26-4 HCAPLUS

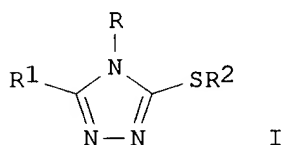
CN Hydrazinecarboxylic acid, 2-[[[trans-4-[(phenylmethoxy)carbonyl]cyclohexyl]methyl]amino]carbonyl]-, 1,1-dimethylethyl ester (9CI) (CA INDEX NAME)

Relative stereochemistry.



CC 34-3 (Amino Acids, Peptides, and Proteins)  
 IT **Solid phase synthesis**  
 (peptide; solid-phase synthesis of peptidyl trifluoromethyl ketones)  
 IT **Combinatorial chemistry**  
**Peptide library**  
 (solid-phase synthesis of peptidyl trifluoromethyl ketones)  
 IT 79-24-3, Nitroethane 79-37-8, Oxalyl chloride 433-27-2,  
 Trifluoroacetaldehyde ethyl hemiacetal 24424-99-5, Di-tert-butyl  
 dicarbonate **139976-26-4**  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solid-phase synthesis of peptidyl trifluoromethyl ketones)  
 REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS  
 RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L53 ANSWER 14 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1998:303618 HCAPLUS  
 DOCUMENT NUMBER: 129:41102  
 TITLE: Solid-supported syntheses of 3-thio-1,2,4-triazoles  
 AUTHOR(S): Wilson, Michael W.; Hernandez, Andres S.; Calvet,  
 Alain P.; Hodges, John C.  
 CORPORATE SOURCE: Exploratory Chemistry, Parke-Davis Pharmaceutical  
 Research, Division of Warner-Lambert Company, Ann  
 Arbor, MI, 48105, USA  
 SOURCE: Molecular Diversity (1998), Volume Date 1997-1998,  
 3(2), 95-112  
 CODEN: MODIF4; ISSN: 1381-1991  
 PUBLISHER: Kluwer Academic Publishers  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 OTHER SOURCE(S): CASREACT 129:41102  
 GI



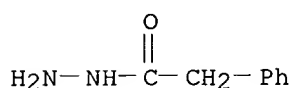
AB Two solid-supported synthesis strategies for the prepn. of  
 3-thio-1,2,4-triazoles I [R = 4-H<sub>2</sub>NCOC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, H<sub>2</sub>NCO(CH<sub>2</sub>)<sub>3</sub>, PhCH<sub>2</sub>,  
 3,4-(MeO)<sub>2</sub>C<sub>6</sub>H<sub>3</sub>CH<sub>2</sub>CH<sub>2</sub>, Ph, Me<sub>2</sub>CHCH<sub>2</sub>, MeO(CH<sub>2</sub>)<sub>2</sub>, Me; R<sub>1</sub> = PhCH<sub>2</sub>, 4-pyridyl,  
 Ph(CH<sub>2</sub>)<sub>2</sub>, 2-Cl-10-phenothiazinylethyl, 1-oxa-3-Ph-2,4-diazol-5-yl,  
 4-PhC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>, Ph, Bu, 1-naphthyl, Ph<sub>2</sub>CH, (S)-Me<sub>2</sub>CHCH<sub>2</sub>CH(NH<sub>2</sub>),  
 (S)-2-(3-indolyl)-1-aminoethyl, H<sub>2</sub>N(CH<sub>2</sub>)<sub>5</sub>, 3-H<sub>2</sub>NC<sub>6</sub>H<sub>4</sub>; R<sub>2</sub> = Me, PhCH<sub>2</sub>,  
 MeO<sub>2</sub>CCH<sub>2</sub>, MeO<sub>2</sub>CCH(Me)] are described. In the first, Rink amide resin is  
 combined with Fmoc-protected .omega.-amino acids, acid hydrazides, and  
 alkyl halides to provide diverse sets of starting materials from which  
 numerous triazoles may be prepd. The second employs t-alkylcarbamate  
 resin (Boc resin) which permits the use of addnl. pools of starting  
 materials, including isothiocyanates and .alpha.-and .omega.-amino esters,  
 resulting in triazoles with patterns of functional groups that are not  
 possible from the initial route. The combination of multiple resins and  
 resin attachment sites allows the prepn. of a diverse library based upon  
 the scaffold of I and avoids the pitfall of having a single linker

functionality present at the same position in all library members. General synthetic procedures and representative products from each route are presented. A similarity anal. of representative sublibraries from each synthesis strategy concludes that variation of the solid-phase linker chem. and attachment site can enhance mol. diversity of the combined triazole library.

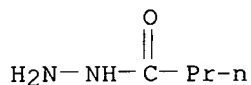
IT 937-39-3 3538-65-6 3538-68-9  
34800-90-3 101103-11-1 139277-58-0  
208470-00-2

RL: RCT (Reactant); RACT (Reactant or reagent)  
(prepn. of thiotriazoles and thiotriazole combinatorial libraries using two different linker systems with different points of attachment to increase library diversity)

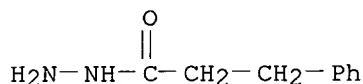
RN 937-39-3 HCAPLUS  
CN Benzeneacetic acid, hydrazide (9CI) (CA INDEX NAME)



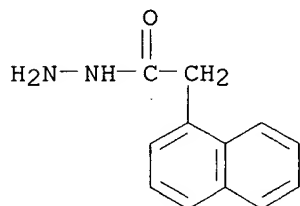
RN 3538-65-6 HCAPLUS  
CN Butanoic acid, hydrazide (9CI) (CA INDEX NAME)



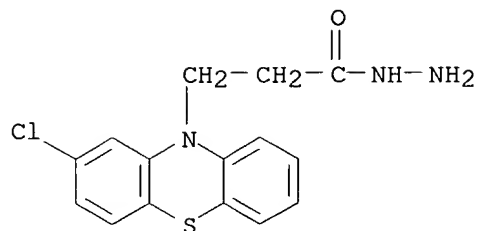
RN 3538-68-9 HCAPLUS  
CN Benzenepropanoic acid, hydrazide (9CI) (CA INDEX NAME)



RN 34800-90-3 HCAPLUS  
CN 1-Naphthaleneacetic acid, hydrazide (9CI) (CA INDEX NAME)

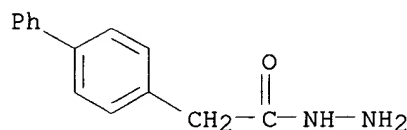


RN 101103-11-1 HCAPLUS  
CN 10H-Phenothiazine-10-propanoic acid, 2-chloro-, hydrazide (9CI) (CA INDEX NAME)



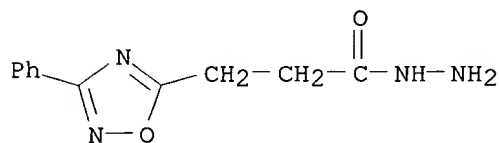
RN 139277-58-0 HCAPLUS

CN [1,1'-Biphenyl]-4-acetic acid, hydrazide (9CI) (CA INDEX NAME)



RN 208470-00-2 HCAPLUS

CN 1,2,4-Oxadiazole-5-propanoic acid, 3-phenyl-, hydrazide (9CI) (CA INDEX NAME)



CC 28-10 (Heterocyclic Compounds (More Than One Hetero Atom))

IT **Combinatorial library****Solid phase synthesis**

(prepn. of thiotriazoles and thiotriazole combinatorial libraries using two different linker systems with different points of attachment to increase library diversity)

IT 54-85-3 96-32-2 100-39-0 103-72-0 591-82-2 613-94-5 622-78-6

**937-39-3 1926-80-3 3538-65-6 3538-68-9**

4518-10-9 5445-17-0 6636-02-8 7517-19-3 7524-52-9 21714-25-0

**34800-90-3 38663-85-3 101103-11-1 116821-47-7****139277-58-0** 164470-64-8 183599-10-2, Rink Amide AM

190074-72-7D, resin bound 190074-85-2D, resin bound 208469-95-8

**208470-00-2**

RL: RCT (Reactant); RACT (Reactant or reagent)

(prepn. of thiotriazoles and thiotriazole combinatorial libraries using two different linker systems with different points of attachment to increase library diversity)

L53 ANSWER 15 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1998:293467 HCAPLUS

DOCUMENT NUMBER: 129:4503

TITLE: Solid-phase synthesis of hydroxylamine compounds, derivatives, and combinatorial libraries thereof

INVENTOR(S): Patel, Dinesh; Nhu, Khehyong  
 PATENT ASSIGNEE(S): Versicor, Inc., USA; Patel, Dinesh; Nhu, Khehyong  
 SOURCE: PCT Int. Appl., 98 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 3  
 PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9818754	A1	19980507	WO 1997-US19481	19971027
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, KE, LS, MW, SD, SZ, UG, ZW, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9854263	A1	19980522	AU 1998-54263	19971027
PRIORITY APPLN. INFO.:			US 1996-29788P	P 19961028
			US 1997-47468P	P 19970523
			WO 1997-US19481	W 19971027

OTHER SOURCE(S): CASREACT 129:4503; MARPAT 129:4503

AB A library comprising a plurality of hydroxylamine and/or hydroxylamine derivs. wherein the library is prepd. by prepg. a solid support-bound alkoxyamine, derivatizing the supported alkoxyamine, cleaving the derivatized alkoxyamine from the support, and removing the alkoxy protecting group, is claimed. Thus, 4-hydroxymethylphenoxy resin was brominated with PPh<sub>3</sub>.Br<sub>2</sub> in CH<sub>2</sub>Cl<sub>2</sub> to give 99% bromomethylphenoxy resin. This was treated with PhCH<sub>2</sub>ONH<sub>2</sub> and K<sub>2</sub>CO<sub>3</sub> in EtOAc/H<sub>2</sub>O to give benzyloxyamine resin, which was treated with PhCH<sub>2</sub>CH<sub>2</sub>COC1 and 2,6-di-tert-butyl-4-methylpyridine in DMF to give N-acylated material. The latter was treated with CF<sub>3</sub>CO<sub>2</sub>H to afford PhCH<sub>2</sub>CH<sub>2</sub>CONHOCH<sub>2</sub>Ph, which was hydrogenated in MeOH over Pd/C to afford PhCH<sub>2</sub>CH<sub>2</sub>CONHOH.

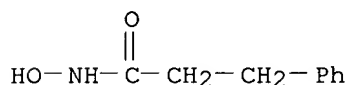
IT **17698-11-2P 56439-40-8P**

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(solid-phase synthesis of hydroxylamine compds., derivs., and combinatorial libraries thereof)

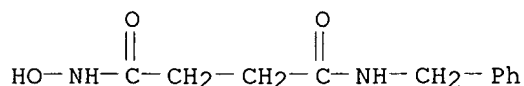
RN 17698-11-2 HCAPLUS

CN Benzenepropanamide, N-hydroxy- (9CI) (CA INDEX NAME)

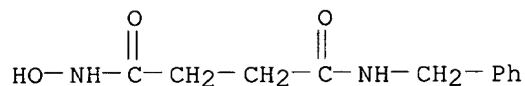


RN 56439-40-8 HCAPLUS

CN Butanediamide, N-hydroxy-N'-(phenylmethyl)- (9CI) (CA INDEX NAME)





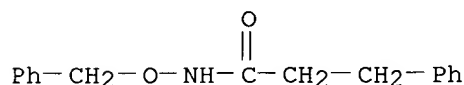
IT **22426-87-5P**

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(solid-phase synthesis of hydroxylamine compds., derivs., and combinatorial libraries thereof)

RN 22426-87-5 HCAPLUS

CN Benzenepropanamide, N-(phenylmethoxy)- (9CI) (CA INDEX NAME)



IC ICM C07C259-06

ICS C07C259-04; C07C275-64; C07K001-04; C07D213-42; C07C311-29

CC 25-22 (Benzene, Its Derivatives, and Condensed Benzenoid Compounds)  
Section cross-reference(s): 34IT **Combinatorial library****Solid phase synthesis**

(solid-phase synthesis of hydroxylamine compds., derivs., and combinatorial libraries thereof)

IT **17698-11-2P 56439-40-8P** 161313-73-1P 193807-79-3P  
207462-42-8P

RL: IMF (Industrial manufacture); SPN (Synthetic preparation); PREP (Preparation)

(solid-phase synthesis of hydroxylamine compds., derivs., and combinatorial libraries thereof)

IT **22426-87-5P** 153720-65-1P 197304-22-6P 197304-23-7P  
197304-24-8P 197304-25-9P

RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(solid-phase synthesis of hydroxylamine compds., derivs., and combinatorial libraries thereof)

L53 ANSWER 16 OF 18 HCAPLUS COPYRIGHT 2002 ACS

ACCESSION NUMBER: 1996:237462 HCAPLUS

DOCUMENT NUMBER: 124:290276

TITLE: Solid phase synthesis of thiazolidinones, metathiazanones, and their derivatives as peptidomimetics.

INVENTOR(S): Holmes, Christopher P.

PATENT ASSIGNEE(S): Affymax Technologies N.V., Neth.

SOURCE: PCT Int. Appl., 117 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

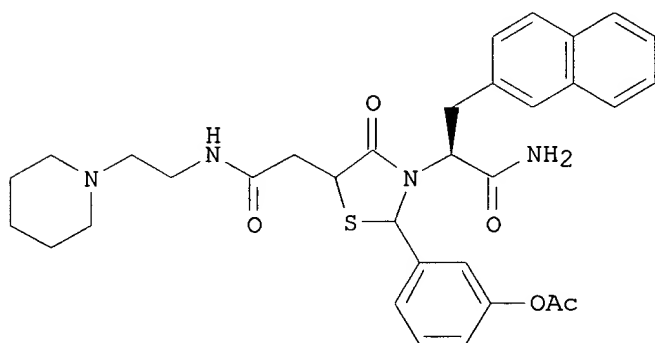
LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9600148 A1 19960104 WO 1995-US7988 19950623  
 W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT  
 RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG  
 US 5549974 A 19960827 US 1994-265090 19940623  
 AU 9529485 A1 19960119 AU 1995-29485 19950623  
 PRIORITY APPLN. INFO.: US 1994-265090 19940623  
 WO 1995-US7988 19950623  
 OTHER SOURCE(S): MARPAT 124:290276  
 GI

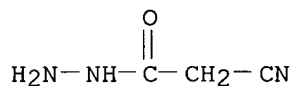


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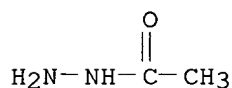
AB Title compds. were prepd. by (1) providing RNH<sub>2</sub> (R = alkyl, alkoxy, amino, aryl, aryloxy, heteroaryl, aralkyl) on the surface of a solid support, (2) treating the amine with R<sub>3</sub>R<sub>4</sub>CO (R<sub>3</sub> = H, R<sub>4</sub> = alkyl, aryl, heteroaryl, aralkyl) and with HSCR<sub>5</sub>R<sub>6</sub>(CR<sub>7</sub>R<sub>8</sub>)nCO<sub>2</sub>H (R<sub>5</sub>-R<sub>8</sub> = H, alkyl, alkoxy, aryl, aryloxy, heteroaryl, CO<sub>2</sub>H, carboxyalkyl, carboxyaryl, aralkyl; n = 0, 1) under conditions that cyclize the components. A library of thiazolidinones was prepd. using TentaGel S resin functionalized with a photolinker, Fmoc-protected amino acids, aldehydes, and various amines and hydrazides and tested for .kappa.-opioid activity. Deconvolution of the library led to thiazolidinone (I), whose isomers showed IC<sub>50</sub> = 45 and 75 nM in an assay against the .kappa.-opioid receptor using 3H-diprenorphine.

IT **140-87-4**, Cyanoacetic acid hydrazide **1068-57-1**, Acetic hydrazide  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solid phase synthesis of thiazolidinones, metathiazanones, and their derivs. as peptidomimetics)

RN 140-87-4 HCAPLUS  
 CN Acetic acid, cyano-, hydrazide (6CI, 8CI, 9CI) (CA INDEX NAME)



RN 1068-57-1 HCAPLUS  
 CN Acetic acid, hydrazide (6CI, 7CI, 8CI, 9CI) (CA INDEX NAME)



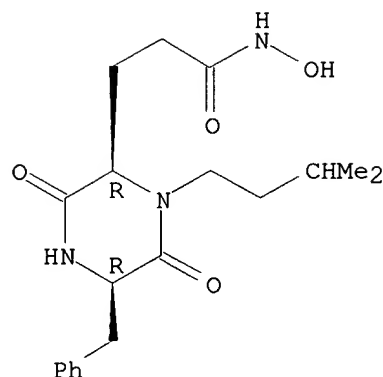
IC ICM B32B009-04  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 Section cross-reference(s): 1  
 IT **Combinatorial library**  
**Merrifield synthesis**  
 (solid phase synthesis of thiazolidinones, metathiazanones, and their  
 derivs. as peptidomimetics)  
 IT 64-04-0, Phenethylamine 68-11-1, Mercaptoacetic acid, reactions  
 70-49-5 89-98-5, 2-Chlorobenzaldehyde 97-96-1, 2-Ethylbutyraldehyde  
 98-01-1, 2-Furaldehyde, reactions 98-86-2, Acetophenone, reactions  
 100-52-7, Benzaldehyde, reactions 100-63-0, Phenylhydrazine 104-53-0,  
 Hydrocinnamaldehyde 104-87-0, p-Tolualdehyde 107-96-0,  
 Mercaptopropionic acid 121-33-5, Vanillin 122-03-2,  
 4-Isopropylbenzaldehyde **140-87-4**, Cyanoacetic acid hydrazide  
 141-43-5, reactions 500-22-1, 3-Pyridinecarboxaldehyde 506-87-6  
 507-09-5, Thiolacetic acid, reactions 529-20-4, o-Tolualdehyde  
 529-27-1, o-Tolylhydrazine 613-45-6, 2,4-Dimethoxybenzaldehyde  
 620-23-5 637-80-9, Ethyl hydrazinoacetate **1068-57-1**, Acetic  
 hydrazide 2043-61-0, Cyclohexanecarboxaldehyde 2491-20-5, Alanine  
 methyl ester hydrochloride 3471-32-7, 4-Methoxyphenylhydrazine  
 4244-84-2, .beta.-Alanine ethyl ester hydrochloride 4518-10-9, Methyl  
 3-aminobenzoate 5680-79-5, Glycine methyl ester hydrochloride  
 5785-06-8 5814-05-1, 2-Chlorobenzoic hydrazide 6306-52-1, Valine  
 methyl ester hydrochloride 7524-50-7 10383-90-1, Benzaldehyde-formyl-  
 13C 13124-18-0, 3,4-Dichlorophenylhydrazine 13214-66-9,  
 4-Phenylbutylamine 18622-23-6, 4-Biphenylcarboxylic acid hydrazide  
 27578-60-5, 1-(2-Aminoethyl)piperidine 29022-11-5, FMOC-Gly-OH  
 32064-67-8, tert-Butylhydrazine 34231-78-2, 3-Acetoxybenzaldehyde  
 35661-39-3 41764-74-3, 3,4-Dimethoxybenzoic acid hydrazide 69770-20-3,  
 3-(4-Chlorophenoxy)benzaldehyde 71989-26-9 71989-40-7 79990-15-1  
 88574-06-5 112883-43-9 135673-97-1 175453-07-3 175453-08-4  
 175453-19-7  
 RL: RCT (Reactant); RACT (Reactant or reagent)  
 (solid phase synthesis of thiazolidinones, metathiazanones, and their  
 derivs. as peptidomimetics)  
 L53 ANSWER 17 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1996:237461 HCAPLUS  
 DOCUMENT NUMBER: 124:290274  
 TITLE: Solid phase synthesis of diketopiperazines  
 (cyclodipeptides).  
 INVENTOR(S): Campbell, David; Gallop, Mark A.; Gordon, Eric M.;  
 Look, Gary C.; Patel, Dinesh; Szardenings, Anna Katrin  
 PATENT ASSIGNEE(S): Affymax Technologies N.V., Neth.  
 SOURCE: PCT Int. Appl., 100 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English

FAMILY ACC. NUM. COUNT: 5

## PATENT INFORMATION:

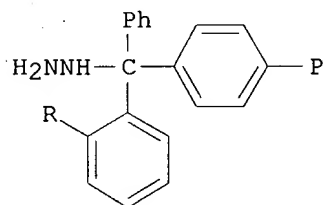
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9600391	A1	19960104	WO 1995-US7964	19950623
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
WO 9535278	A1	19951228	WO 1995-US7878	19950622
W: AM, AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LT, LU, LV, MD, MG, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TT				
RW: KE, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9528711	A1	19960119	AU 1995-28711	19950623
PRIORITY APPLN. INFO.:			US 1994-265578	19940623
			US 1995-393318	19950222
			WO 1995-US7878	19950622
			US 1994-264136	19940622
			US 1994-354309	19941212
			WO 1995-US7964	19950623
AB	A library of diverse diketopiperazines comprising a plurality of solid supports having a plurality of surface-bound diketopiperazines, wherein the diketopiperazines bound to each of the solid supports are substantially homogeneous and have a compn. substantially different from diketopiperazines bound to selected other supports, are claimed. Thus, TentaGel S resin functionalized with Knorr linker was coupled with FMOC-Glu(OMe)-OH using BOP/DIEA in DMF followed by deprotection, coupling with FMOC-Gly, and deprotection. Heating the resin-bound dipeptide in MeOH/Et3N gave resin-bound diketopiperazine product, which was treated with TFA/H2O to give 61% cyclo(Gln-Gly).			
IT	<b>175452-67-2P</b>			
	RL: SPN (Synthetic preparation); PREP (Preparation) (solid phase synthesis of diketopiperazines)			
RN	175452-67-2 HCAPLUS			
CN	2-Piperazinepropanamide, N-hydroxy-1-(3-methylbutyl)-3,6-dioxo-5-(phenylmethyl)-, (2R-cis)- (9CI) (CA INDEX NAME)			

Absolute stereochemistry.

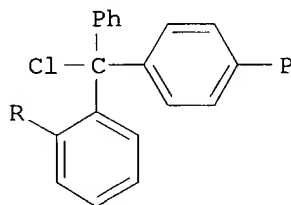


IC ICM G01N033-53  
 ICS G01N033-545; C07K017-08; C07D241-02  
 CC 34-3 (Amino Acids, Peptides, and Proteins)  
 IT **Merrifield synthesis**  
 (solid phase synthesis of diketopiperazines)  
 IT **Combinatorial library**  
 (solid phase synthesis of diketopiperazines (cyclodipeptides))  
 IT 52662-00-7P 59017-01-5P 175452-59-2P 175452-60-5P 175452-61-6P  
 175452-62-7P 175452-63-8P 175452-64-9P 175452-65-0P 175452-66-1P  
**175452-67-2P** 175452-69-4P 175452-71-8P 175452-73-0P  
 175452-75-2P 175452-77-4P 175452-79-6P 175452-81-0P 175452-83-2P  
 175452-85-4P 175452-87-6P 175452-94-5DP, resin-bound 175452-95-6DP,  
 resin-bound 175452-96-7DP, resin-bound 175669-66-6P 175669-67-7P  
 175669-68-8P 175669-70-2P  
 RL: SPN (Synthetic preparation); PREP (Preparation)  
 (solid phase synthesis of diketopiperazines)

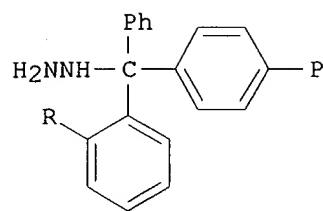
L53 ANSWER 18 OF 18 HCAPLUS COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 1996:86347 HCAPLUS  
 DOCUMENT NUMBER: 124:233130  
 TITLE: Preparation of polymer-bound trityl-hydrazines and  
 their application in the solid phase synthesis of  
 partially protected peptide hydrazides  
 AUTHOR(S): Stravropoulos, George; Gatos, Dimitrios; Magafa,  
 Vassiliki; Barlos, Kleomenis  
 CORPORATE SOURCE: Dep. Chem., Univ. Patras, Patras, 26500, Greece  
 SOURCE: Letters in Peptide Science (1996), 2(5), 315-18  
 CODEN: LPSCEM; ISSN: 0929-5666  
 PUBLISHER: ESCOM  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI



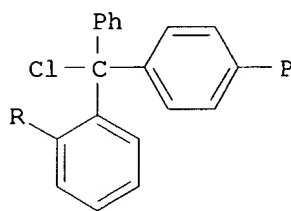
I



II



I



II

AB Polymer-bound N-tritylhydrazines I (R = H, Cl; P = polystyrene polymer support) were easily prep'd. by reacting polymeric trityl chlorides II with hydrazine. Subsequently, I were successfully applied to the solid phase synthesis of partially protected peptide hydrazides using 1-hydroxybenzotriazolyl esters of 9-fluorenylmethoxycarbonyl (Fmoc)- or tritylamino acids. The synthesized peptide hydrazides can be quant. split off from the resins by mild acidic treatment, while the benzyl and tert-Bu protecting groups remain unaffected.

IT **174872-59-4P 174872-60-7P**

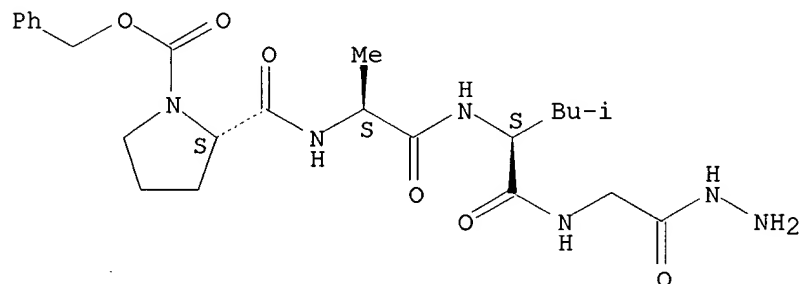
RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of polymer-bound tritylhydrazines and use in solid phase synthesis of peptide hydrazides)

RN 174872-59-4 HCAPLUS

CN Glycine, N-[N-[N-[1-[(phenylmethoxy)carbonyl]-L-prolyl]-L-alanyl]-L-leucyl]-, hydrazide (9CI) (CA INDEX NAME)

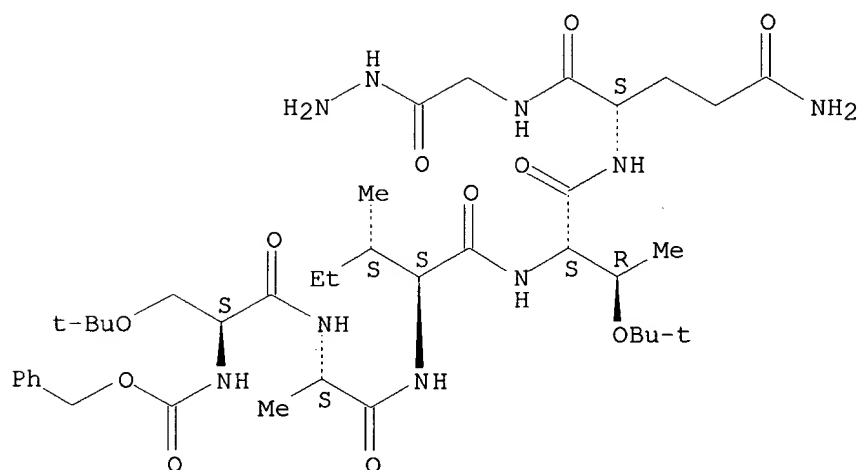
Absolute stereochemistry.



RN 174872-60-7 HCAPLUS

CN Glycine, N-[N2-[O-(1,1-dimethylethyl)-N-[N-[N-[O-(1,1-dimethylethyl)-N-[(phenylmethoxy)carbonyl]-L-seryl]-L-alanyl]-L-isoleucyl]-L-threonyl]-L-glutaminyl]-, hydrazide (9CI) (CA INDEX NAME)

Absolute stereochemistry.



CC 34-3 (Amino Acids, Peptides, and Proteins)

IT **Merrifield synthesis**

**Polymer-supported reagents**

(prepn. of polymer-bound tritylhydrazines and use in solid phase synthesis of peptide hydrazides)

IT **174872-59-4P 174872-60-7P**

RL: SPN (Synthetic preparation); PREP (Preparation)

(prepn. of polymer-bound tritylhydrazines and use in solid phase synthesis of peptide hydrazides)

=> d que 165

L56 STR

RRT

RRT

PRO

O $\sim$ C $\equiv$ G2

G1 $\sim$ N

G1 $\sim$ N $\sim$ C $\equiv$ G2

1 2 3

4 5

6 7 8 9

VAR G1=N/O

VAR G2=O/S

NODE ATTRIBUTES:

CONNECT IS E1 RC AT 1

CONNECT IS E1 RC AT 5

CONNECT IS E2 RC AT 7

DEFAULT MLEVEL IS ATOM

DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:

RING(S) ARE ISOLATED OR EMBEDDED

NUMBER OF NODES IS 9

STEREO ATTRIBUTES: NONE

\*\*\*\*MAPPINGS\*\*\*\*

NOD SYM	ROL	NOD SYM	ROL
2 C	RRT	8 C	PRO
5 N	RRT	7 N	PRO
7 N	PRO	5 N	RRT
8 C	PRO	2 C	RRT

L58 402 SEA FILE=CASREACT SSS FUL L56 ( 1568 REACTIONS)

L59 380 SEA FILE=CASREACT\ ABB=ON PLU=ON L58/COM

L64 1010 SEA FILE=CASREACT ABB=ON PLU=ON SOLID PHASE SYNTHESIS?/CT

L65 5 SEA FILE=CASREACT ABB=ON PLU=ON L59 AND L64

=> d ibib abs crd 1-5 165

L65 ANSWER 1 OF 5 CASREACT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 135:77080 CASREACT

TITLE: Solution/solid-phase synthesis of partially modified retro-.psi.[NHCH(CF<sub>3</sub>)]-peptidyl hydroxamates

AUTHOR(S): Volonterio, A.; Bravo, P.; Zanda, M.

CORPORATE SOURCE: via Mancinelli 7, C.N.R.-Centro di Studio sulle Sostanze Organiche Naturali, Milan, I-20131, Italy

SOURCE: Tetrahedron Letters (2001), 42(17), 3141-3144

CODEN: TELEAY; ISSN: 0040-4039

PUBLISHER: Elsevier Science Ltd.

DOCUMENT TYPE: Journal

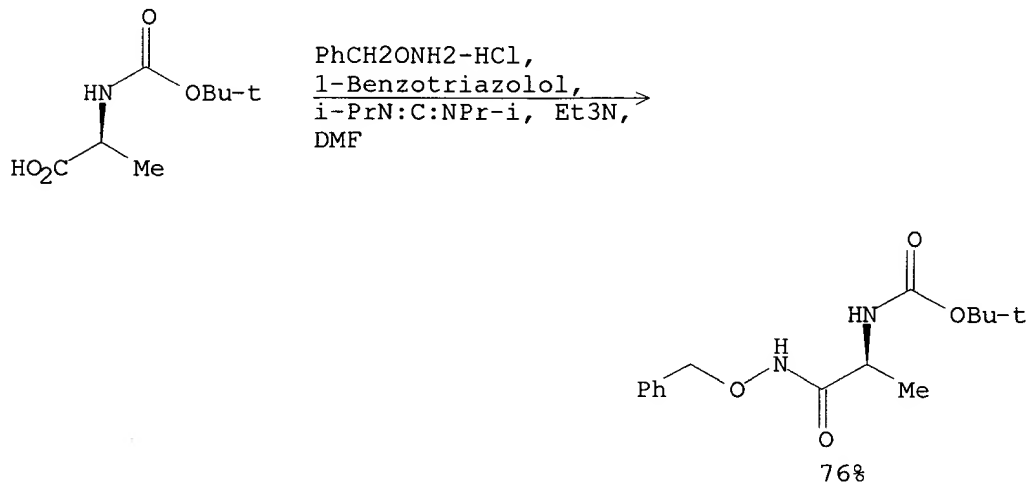
LANGUAGE: English

AB The synthesis of a novel family of partially-modified (PM) retropeptidyl hydroxamates incorporating a [CH(CF<sub>3</sub>)CH<sub>2</sub>CO] unit as a surrogate of the conventional malonyl group, has been accomplished both in soln. and in solid-phase. The key step is the Michael-type N-addn. of free or polymer bound .alpha.-amino hydroxamates to 3-(E-enoyl)-1,3-oxazolidin-2-ones, which takes place very effectively, although with low stereocontrol. A



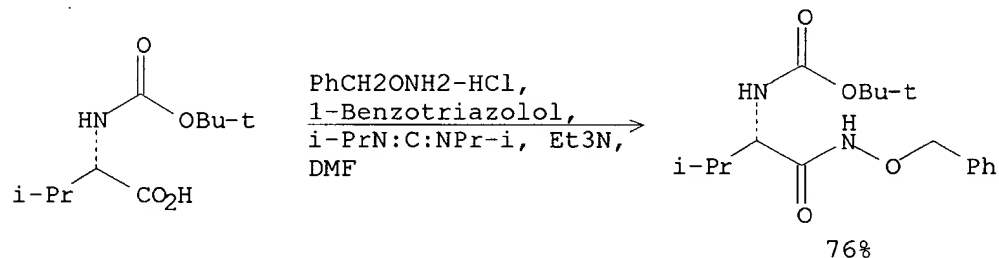
no. of tri- and tetra-peptidyl hydroxamates were obtained either in diastereomerically pure form (by soln.-phase synthesis, after chromatog. purifn.), or as mixts. of two epimers in very good chem. purity (by solid-phase, after release from the resin), demonstrating that this method is suitable for prepg. combinatorial libraries of PM retro-.psi.[NHCH(CF<sub>3</sub>)]-peptidyl hydroxamates for screening as metalloprotease inhibitors.

RX(1) OF 63



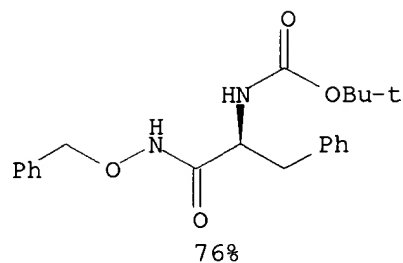
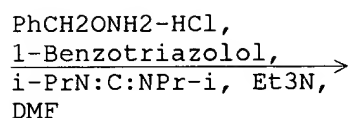
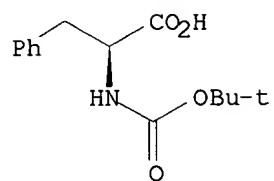
NOTE: stereoselective

RX(2) OF 63



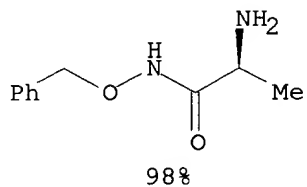
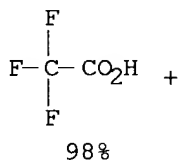
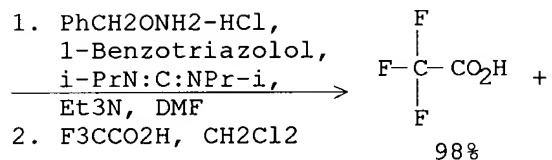
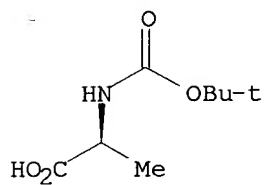
NOTE: stereoselective

RX(3) OF 63



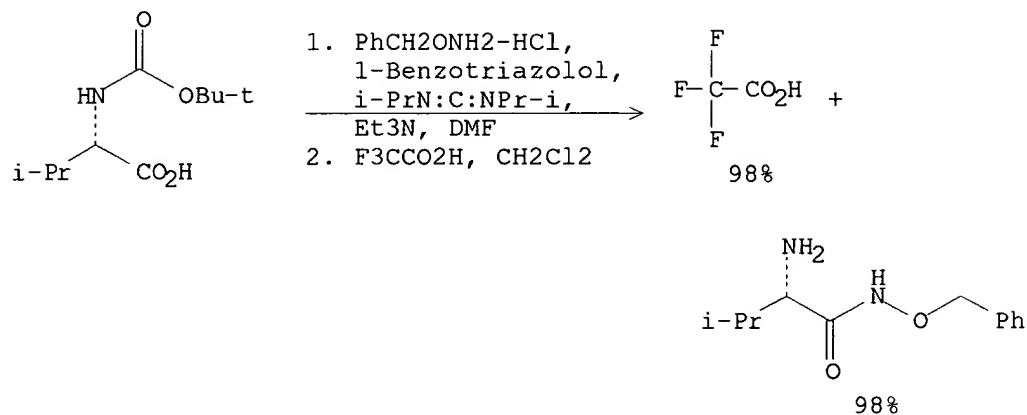
NOTE: stereoselective

RX(24) OF 63 - 2 STEPS



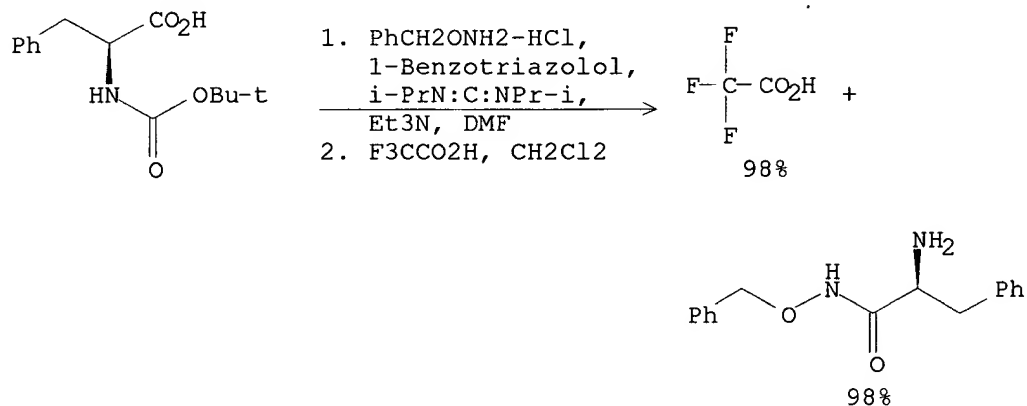
NOTE: 1) stereoselective, 2) stereoselective

RX(25) OF 63 - 2 STEPS



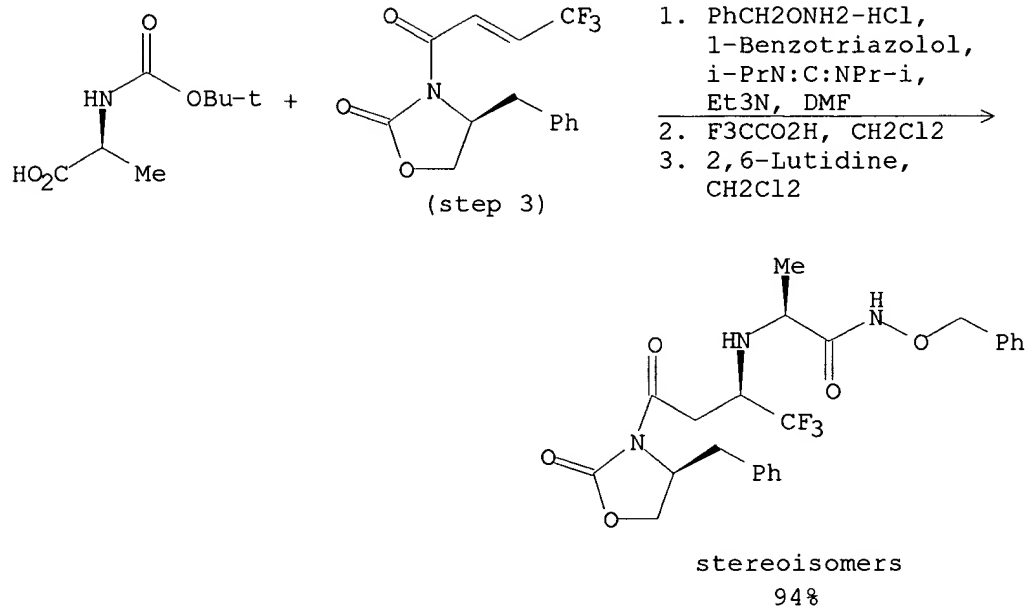
NOTE: 1) stereoselective, 2) stereoselective

RX(26) OF 63 - 2 STEPS



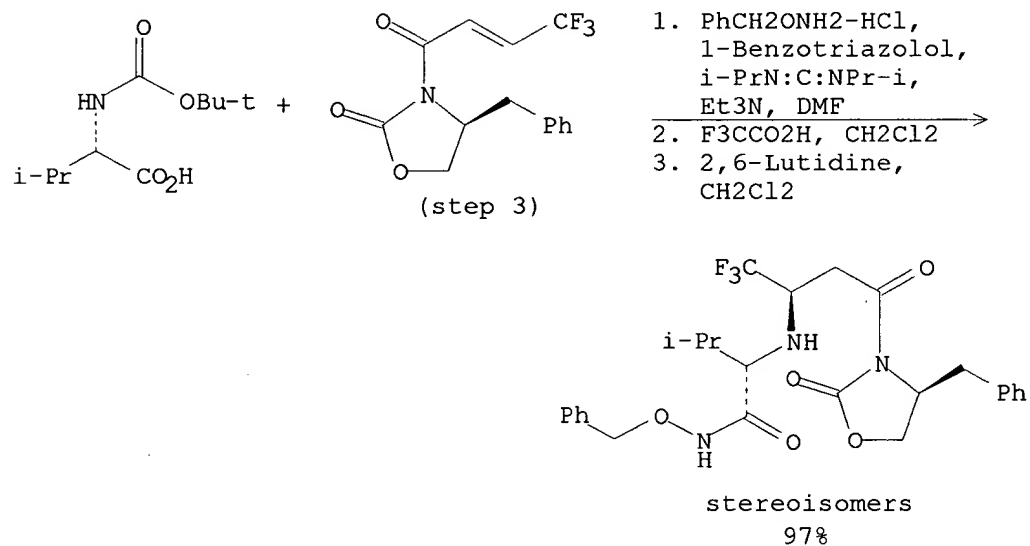
NOTE: 1) stereoselective, 2) stereoselective

RX(43) OF 63 - 3 STEPS



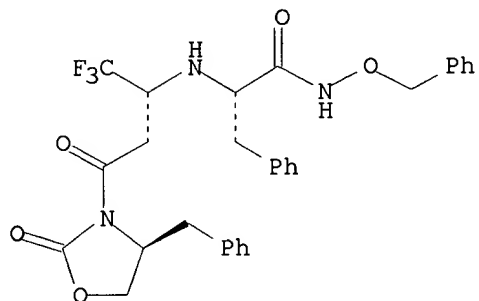
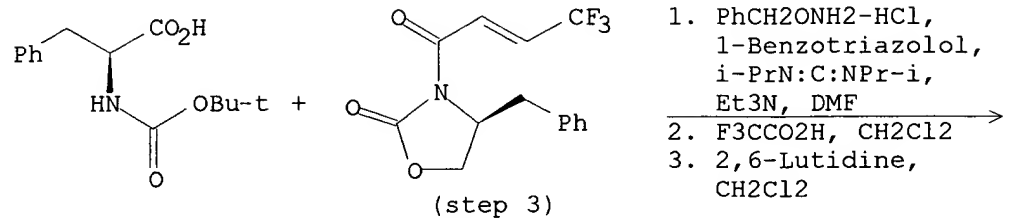
NOTE: 1) stereoselective, 2) stereoselective, 3) stereoselective

RX(44) OF 63 - 3 STEPS



NOTE: 1) stereoselective, 2) stereoselective, 3) stereoselective

RX(45) OF 63 - 3 STEPS

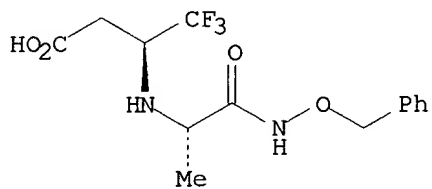
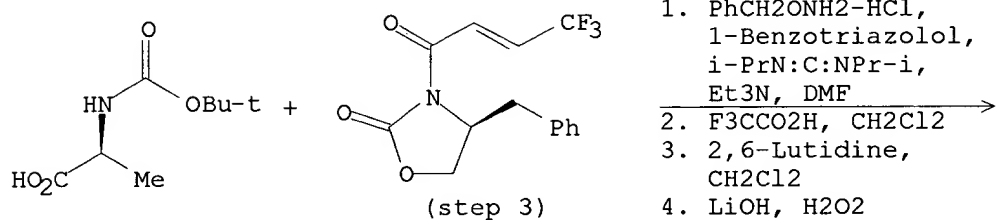


stereoisomers

98%

NOTE: 1) stereoselective, 2) stereoselective, 3) stereoselective

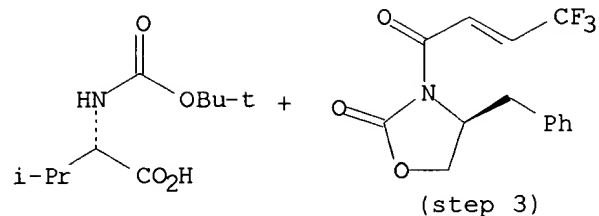
RX(47) OF 63 - 4 STEPS



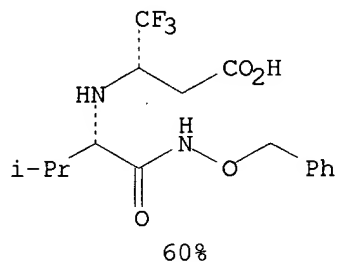
75%

NOTE: 1) stereoselective, 2) stereoselective, 3) stereoselective, 4) stereoselective

## RX(49) OF 63 - 4 STEPS

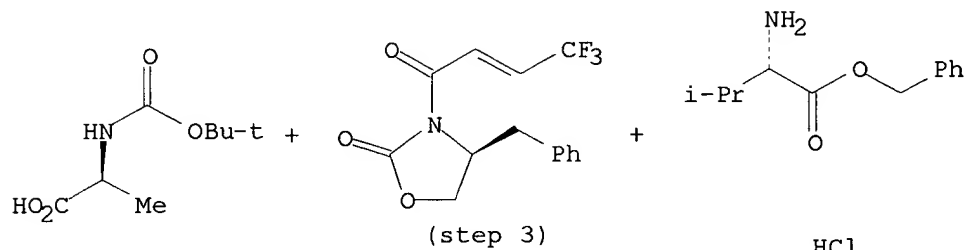


1. PhCH<sub>2</sub>ONH<sub>2</sub>-HCl, 1-Benzotriazolol, i-PrN:C:NPr-i, Et<sub>3</sub>N, DMF
2. F<sub>3</sub>CCO<sub>2</sub>H, CH<sub>2</sub>Cl<sub>2</sub>
3. 2,6-Lutidine, CH<sub>2</sub>Cl<sub>2</sub>
4. LiOH, H<sub>2</sub>O<sub>2</sub>

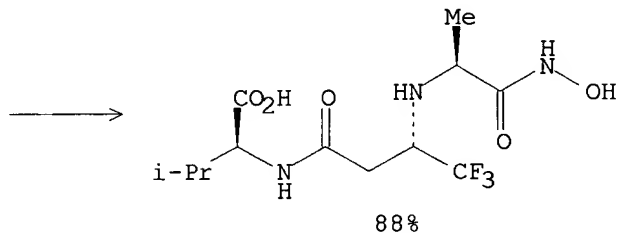


NOTE: 1) stereoselective, 2) stereoselective, 3) stereoselective, 4) stereoselective

## RX(62) OF 63 - 5 STEPS

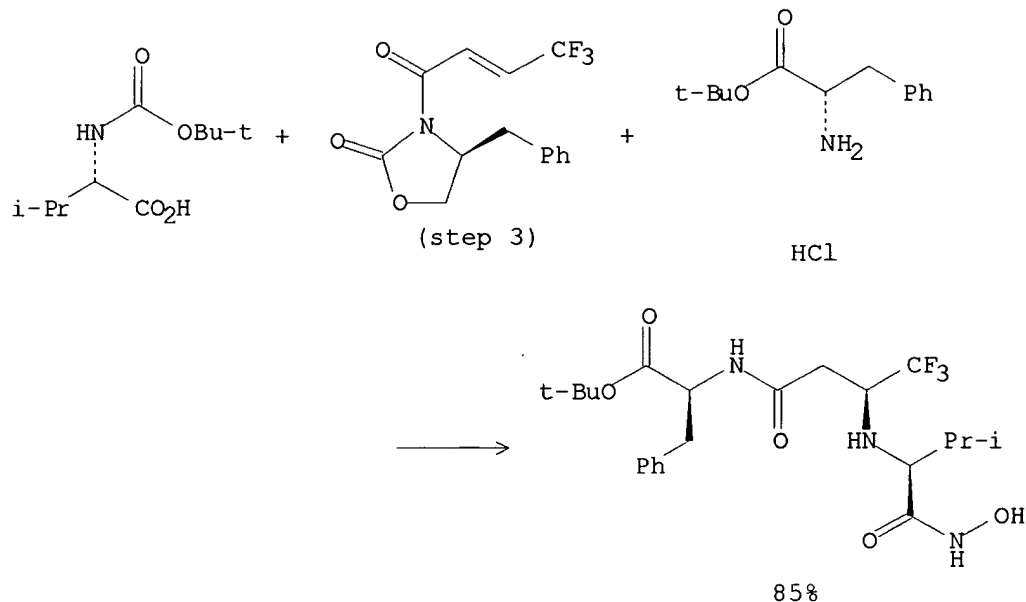


HCl



NOTE: 1) stereoselective, 2) stereoselective, 3) stereoselective, 4) stereoselective, 5) stereoselective

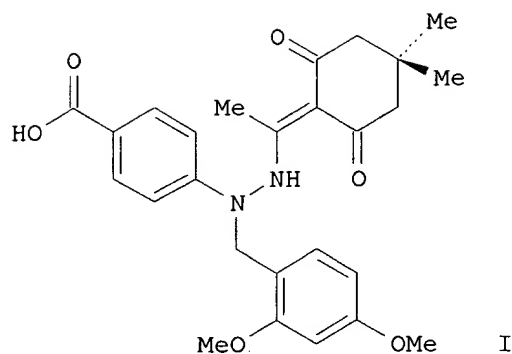
RX(63) OF 63 - 5 STEPS



NOTE: 1) stereoselective, 2) stereoselective, 3) stereoselective, 4) stereoselective, 5) stereoselective

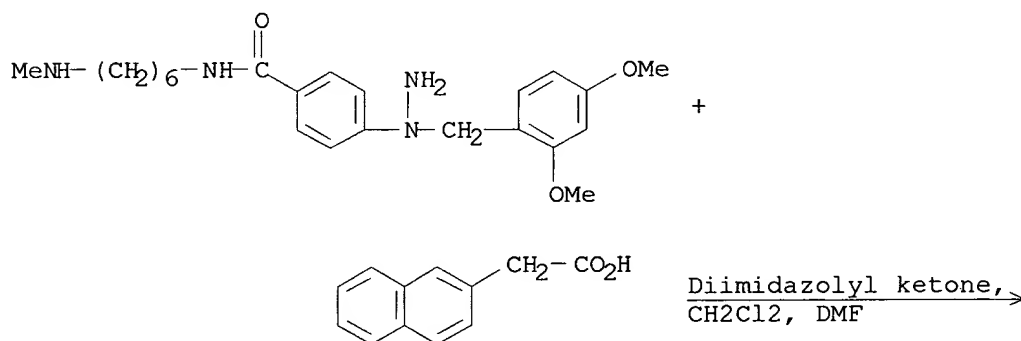
REFERENCE COUNT: 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L65 ANSWER 2 OF 5 CASREACT COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 133:321681 CASREACT  
 TITLE: A latent aryl hydrazine 'safety-catch' linker compatible with N-alkylation  
 AUTHOR(S): Berst, F.; Holmes, A. B.; Ladlow, M.; Murray, P. J.  
 CORPORATE SOURCE: Lensfield Road, Department of Chemistry, University Chemical Laboratories, Cambridge, CB2 1EW, UK  
 SOURCE: Tetrahedron Letters (2000), 41(34), 6649-6653  
 CODEN: TELEAY; ISSN: 0040-4039  
 PUBLISHER: Elsevier Science Ltd.  
 DOCUMENT TYPE: Journal  
 LANGUAGE: English  
 GI

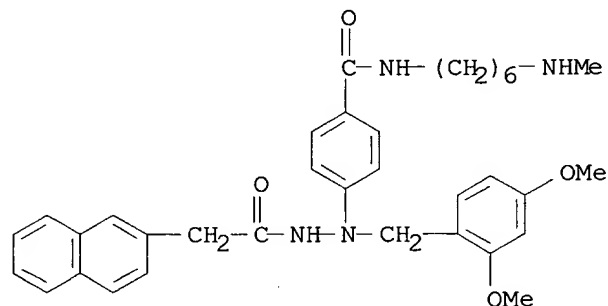


AB The arylhydrazine linker I for solid-phase chem. was prep'd. and attached to resin-bound 4,2-HO<sub>2</sub>C(O<sub>2</sub>N)C<sub>6</sub>H<sub>3</sub>SO<sub>2</sub>NMe(CH<sub>2</sub>)<sub>6</sub>NH<sub>2</sub>. The resulting solid-phase linker is compatible with N-alkylation. Its use is exemplified by the prepn. of mono-ketopiperazines, whereby release from resin is effected via an intramol. cyclitive cleavage strategy.

RX(5) OF 30

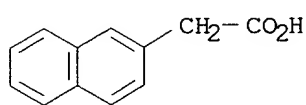
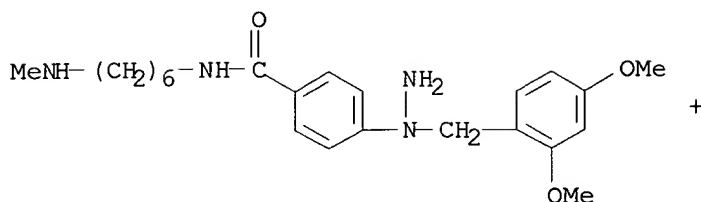


RX(5) OF 30

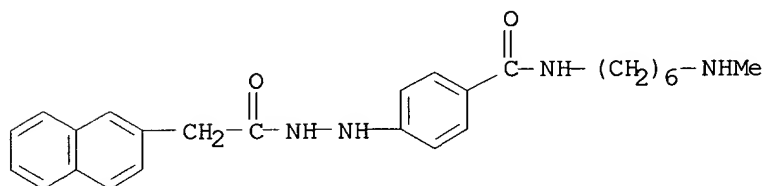




RX(20) OF 30 - 2 STEPS



1. Diimidazolyl ketone,  
CH<sub>2</sub>Cl<sub>2</sub>, DMF  
2. F<sub>3</sub>CCO<sub>2</sub>H, CH<sub>2</sub>Cl<sub>2</sub>,  
Water



REFERENCE COUNT: 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L65 ANSWER 3 OF 5 CASREACT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 133:296036 CASREACT

TITLE: Process for the solid phase synthesis of aldehyde, ketone, oxime, amine, hydroxamic acid, and .alpha.,.beta.-unsaturated carboxylic acid and aldehyde compounds

INVENTOR(S): Salvino, Joseph M.; Morton, George C.; Mason, Helen J.; Labaudiniere, Richard F.

PATENT ASSIGNEE(S): USA

SOURCE: U.S., 43 pp., Cont.-in-part of Appl. No. PCT/US97/23920.

CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 8

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6133409	A	20001017	US 1998-103872	19980624
WO 9724117	A1	19970710	WO 1997-US264	19970102

W: AL, AM, AT, AU, AZ, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, EE, ES, FI, GB, GE, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, TJ, TM, TR, TT, UA, UG, US, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM

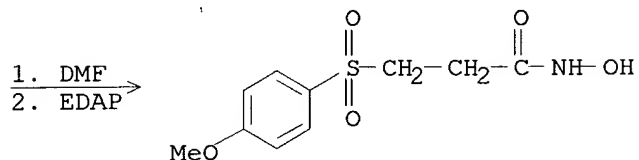
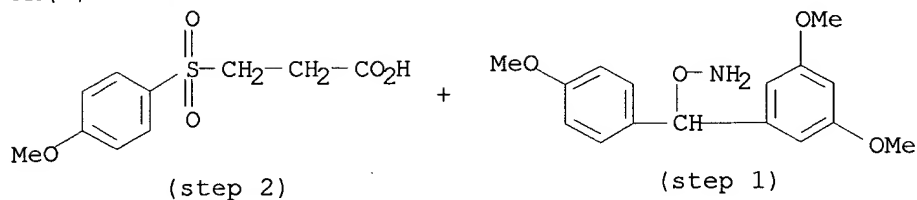
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US 6057369	A	20000502	US 1997-928943	19970912
WO 9829376	A1	19980709	WO 1997-US23920	19971217
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
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ZA 9711453	A	19980914	ZA 1997-11453	19971219
WO 9967192	A2	19991229	WO 1999-US14251	19990623
WO 9967192	A3	20000406		
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EP 1089958	A2	20010411	EP 1999-930627	19990623
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
JP 2002518553	T2	20020625	JP 2000-555848	19990623
US 6392010	B1	20020521	US 1999-469829	19991222
NO 2000006566	A	20010222	NO 2000-6566	20001221
PRIORITY APPLN. INFO.:			US 1996-32453P	19961219
			US 1996-33881P	19961224
			WO 1997-US264	19970102
			US 1997-928943	19970912
			WO 1997-US23920	19971217
			US 1996-9484P	19960102
			US 1998-103872	19980624
			WO 1999-US14251	19990623

OTHER SOURCE(S): MARPAT 133:296036

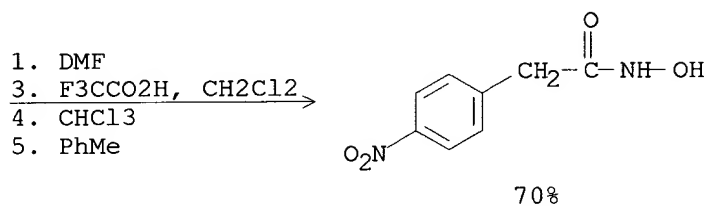
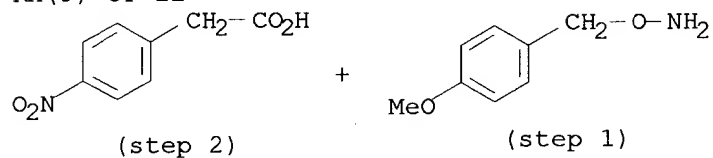
AB For example, Wang resin was condensed with N-hydroxyphthalimide and the product hydrazinolized to give an O-amino resin which was amidated by 4,3-BrMeC<sub>6</sub>H<sub>3</sub>CO<sub>2</sub>H to give RONHCOC<sub>6</sub>H<sub>4</sub>MeBr-3,4 (R = resin). The latter was N-alkylated by 4-ClC<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>Br and the product treated with acid to give 4-ClC<sub>6</sub>H<sub>4</sub>N(OH)COC<sub>6</sub>H<sub>4</sub>MeBr-3,4.

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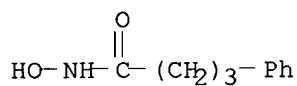
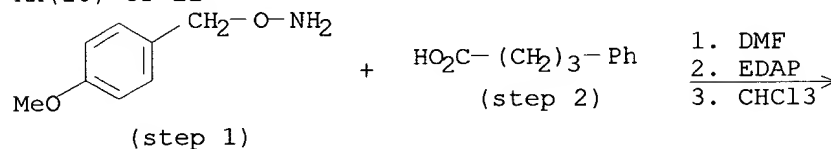
NOTE: RESIN SUPPORTED REACTION

RX(9) OF 22

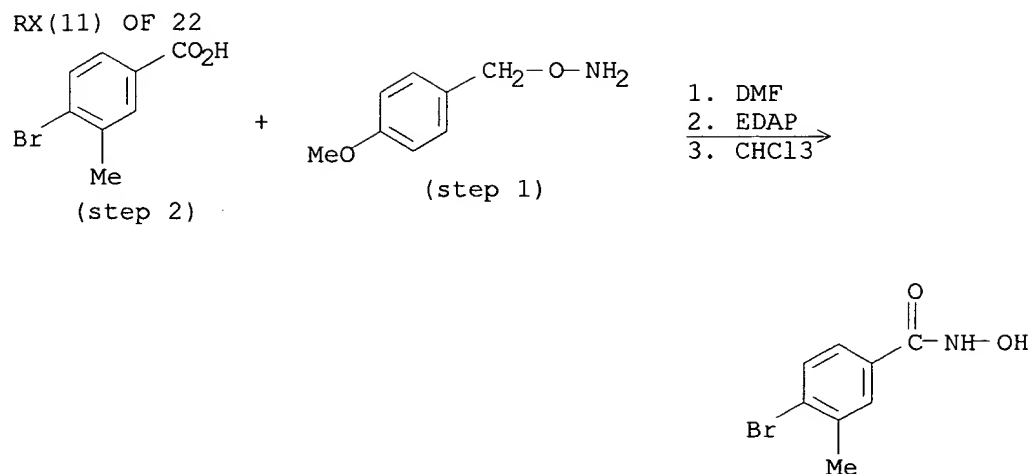


NOTE: RESIN SUPPORTED REACTION

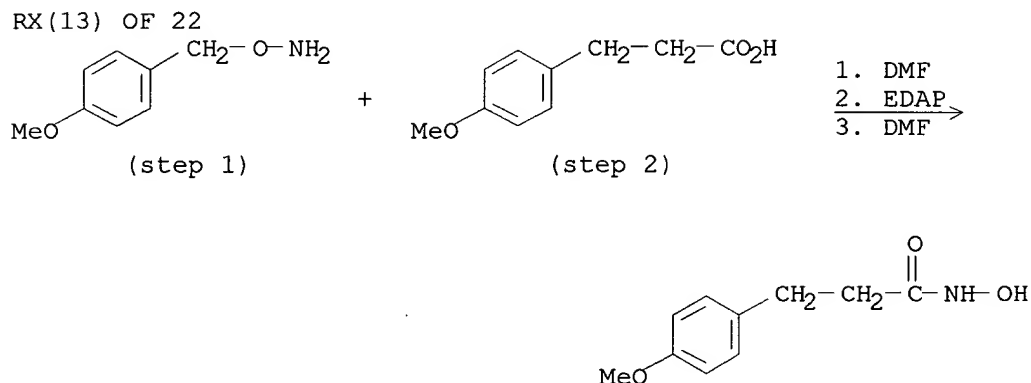
RX(10) OF 22



NOTE: RESIN SUPPORTED REACTION



NOTE: RESIN SUPPORTED REACTION



NOTE: RESI SUPPORTED REACTION

REFERENCE COUNT: 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L65 ANSWER 4 OF 5 CASREACT COPYRIGHT 2002 ACS  
 ACCESSION NUMBER: 132:63782 CASREACT  
 TITLE: Solid phase synthesis of carbonyl compounds  
 INVENTOR(S): Salvino, Joseph M.; Morton, George C.; Mason, Helen J.; Labaudiniere, Richard F.  
 PATENT ASSIGNEE(S): Rhone-Poulenc Rorer Pharmaceuticals Inc., USA  
 SOURCE: PCT Int. Appl., 139 pp.  
 CODEN: PIXXD2  
 DOCUMENT TYPE: Patent  
 LANGUAGE: English  
 FAMILY ACC. NUM. COUNT: 8  
 PATENT INFORMATION:

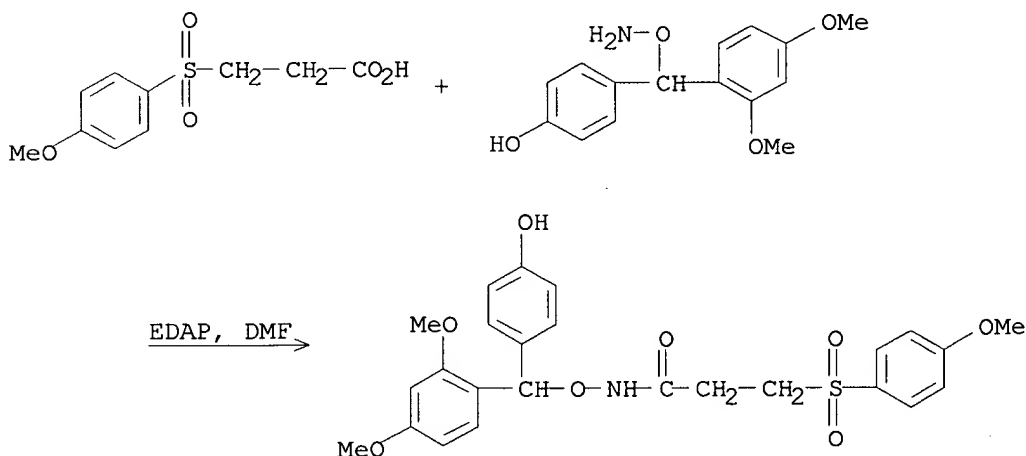
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
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WO 9967192	A2	19991229	WO 1999-US14251	19990623
WO 9967192	A3	20000406		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GE, GH, HU, IL, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, US, UZ, VN, YU, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
US 6133409	A	20001017	US 1998-103872	19980624
EP 1089958	A2	20010411	EP 1999-930627	19990623
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, FI, RO				
JP 2002518553	T2	20020625	JP 2000-555848	19990623
US 6392010	B1	20020521	US 1999-469829	19991222
NO 2000006566	A	20010222	NO 2000-6566	20001221
PRIORITY APPLN. INFO.:			US 1998-103872	19980624
			US 1996-32453P	19961219
			US 1996-33881P	19961224
			WO 1997-US264	19970102
			US 1997-928943	19970912
			WO 1997-US23920	19971217
			WO 1999-US14251	19990623

OTHER SOURCE(S): MARPAT 132:63782

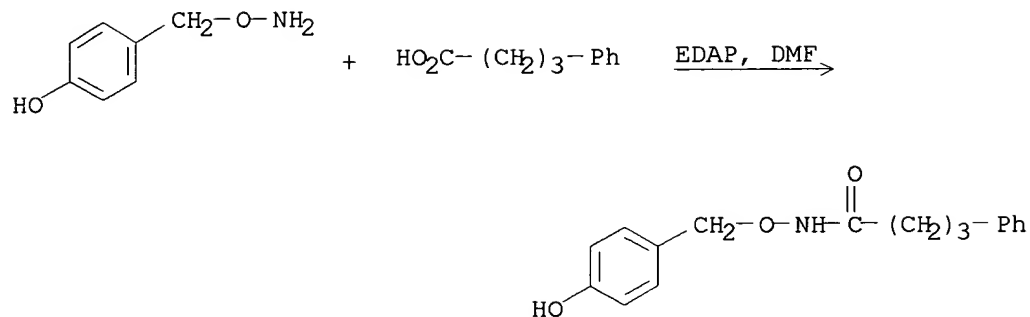
AB Title compds. were prepd. by condensation of RLONRbCORa (R = resin; L = bond or linking group; Ra,Rb = aliph. group, aryl) with RcM (M = metal cation; Rc = aliph. or aryl anion). Thus, 4-(RO)C<sub>6</sub>H<sub>4</sub>CH<sub>2</sub>ON(CH<sub>2</sub>C<sub>6</sub>H<sub>4</sub>Br-4)CO(CH<sub>2</sub>)<sub>3</sub>Ph (prepn given) was treated with LiAlH<sub>3</sub>OMe to give Ph(CH<sub>2</sub>)CHO.

RX(2) OF 67



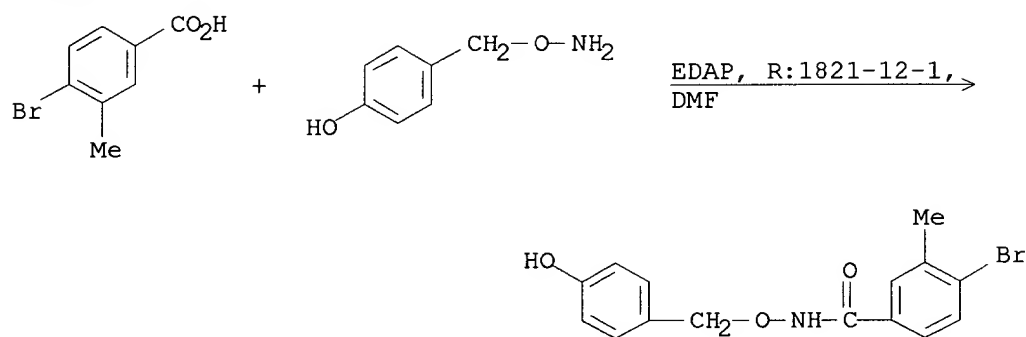
NOTE: SOLID SUPPORTED REACTION

RX (24) OF 67



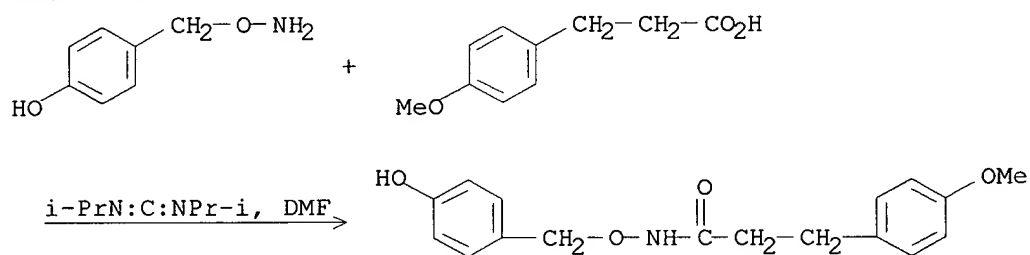
NOTE: SOLID SUPPORTED REACTION

RX (25) OF 67



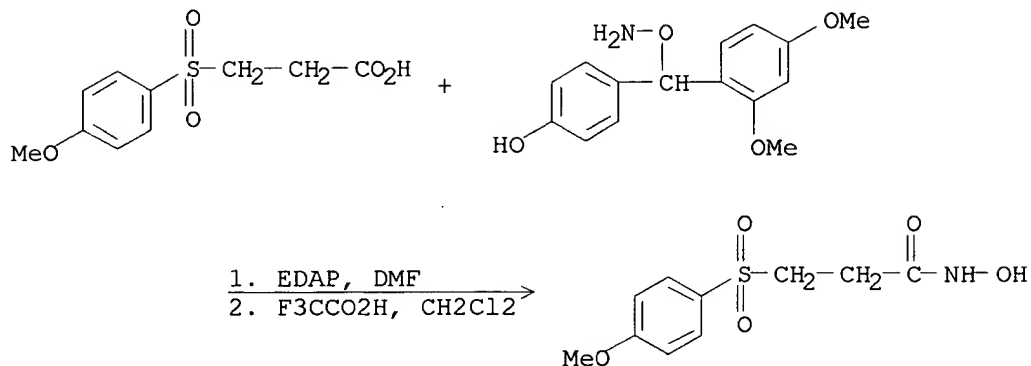
NOTE: SOLID SUPPORTED REACTION

RX (27) OF 67



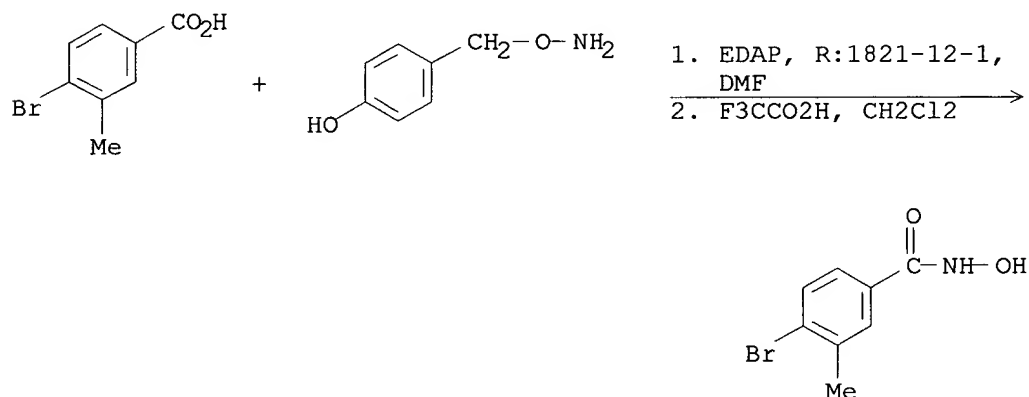
NOTE: SOLID SUPPORTED REACTION

RX(34) OF 67 - 2 STEPS



NOTE: 1) SOLID SUPPORTED REACTION, 2) SOLID SUPPORTED REACTION

RX(46) OF 67 - 2 STEPS



NOTE: 1) SOLID SUPPORTED REACTION, 2) SOLID SUPPORTED REACTION

L65 ANSWER 5 OF 5 CASREACT COPYRIGHT 2002 ACS

ACCESSION NUMBER: 131:87512 CASREACT

TITLE: Solid-support synthesis of hydroxamic acids using resins with oxime moieties

INVENTOR(S): Golebiowski, Adam; Klopfenstein, Sean Rees

PATENT ASSIGNEE(S): The Procter &amp; Gamble Company, USA

SOURCE: PCT Int. Appl., 14 pp.

CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 1

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9935126	A1	19990715	WO 1998-IB2117	19981228
W: AU, CA, IL, JP, NO, NZ, US				

RW: AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL,  
PT, SE

CA 2318487	AA 19990715	CA 1998-2318487	19981228
AU 9915029	A1 19990726	AU 1999-15029	19981228
EP 1045831	A1 20001025	EP 1998-959113	19981228

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, PT, IE, FI

JP 2002500216	T2 20020108	JP 2000-527528	19981228
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US 6291709	B1 20010918	US 2000-582975	20000707
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NO 2000003541	A 20000831	NO 2000-3541	20000710
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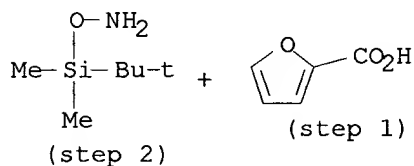
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US 1998-70980P	19980109
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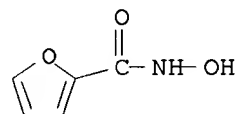
WO 1998-IB2117	19981228
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AB Hydroxamic acids are prepd. in high yield and selectivity using a solid-support resin having an oxime moiety as the linking moiety [where the functional moiety attached to the polymer backbone is 4-C6H4C(:NOH)C6H4NO2-4'] by: (A) condensing the resin with a carboxylic acid (e.g., 2-furoic acid) to form a bound oxime ester; (B) optionally modifying the side chain; (C) cleaving a product from the resin by reaction with Me3CSi(Me)2ONH2; (D) optionally modifying the side chain; and (E) optionally treating the resulting O-TBS-protected material RCONHOSi(Me)2CMe3 (R = 2-furyl) with acid (e.g., trifluoroacetic acid) to produce an unprotected hydroxamic acid RCONHOH.

RX(1) OF 1



1. 4-DMAP,  
 i-PrN:C:NPr-i,  
 Polysorb 1, CH2Cl2  
 2. ClCH2CH2Cl  
 3. F3CCO2H, Water



72%

NOTE: resin bound

REFERENCE COUNT:

2

THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT